

GOA FOREST NEWS



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CONCLUDING FUNCTION OF WILDLIFE WEEK 2010



Left to Right: Shri Sanjay Kumar Srivastava, CS, Dr. Shashi Kumar, APCCF, Shri. Filipe Neri Rodrigues, HMF, Shri. D.N.F. Carvalho, DCF, Shri. Digambar Kamat, HCM, Shri. Babu Kavlekar, MLA, Shri. Arjun Salgaokar, Shri. V. Khawlhring, CF, Shri Yogesh, CCF

The concluding function of Wildlife Week 2010 was held at Bhagwan Mahaveer Wildlife Sanctuary at Mollem on 16th Jan 2011. A Statue of Bhagwan Mahaveer, installed near the entry point at Mollem, was also unveiled on the same day.

The unveiling of statue was done at the hands of Shri Digambar V. Kamat, Hon'ble Chief Minister, Government of Goa, in presence of Shri Filipe Neri Rodrigues, Hon'ble Forest Minister and Shri Sanjay Kumar Srivastava, IAS, Chief Secretary, Government of Goa, Dr. Shashi Kumar, Addl. Principal Chief Conservator of Forest, Forest Department, Shri T.M. Balakrishnan, IAS, Special Secretary (Forest), Government of Goa, Shri Yogesh, IFS, Chief Conservator of Forest, Shri V. Khawlhring, IFS, Conservator of Forests, Shri Arjun Salgaokar, Social Worker, Dy. Conservators of Forests, Asstt. Conservators

of Forests, Smt. Lambor, Zilla Panchayat Member, Range Forest Officers and other forest staff, Members of Public, Government Officials, Students and Prize Winners were present on the occasion. The member of Jain community performed Puja and recited Bhajans of the God and Prof Gangwal, delivered a talk on the preaching of Bhagwan Mahavir. Many followers of Jain religion were present on the occasion.

The Statue was procured from Rajasthan under supervision of Committee consisting of members with expertise in the field. The unveiling ceremony was followed by the Prize distribution of the various competitions held for celebrating Wildlife Week 2010. Prizes were distributed to the winners of competitions held in various categories from primary school children to college level.

"Forest : Nature at your service"

CONVOCATION OF XXXTH BATCH OF FOREST GUARDS TRAINING

The Convocation ceremony of XXXth Batch of Direct Recruit Forest Guards was held in the Auditorium of the Forest Training School, Valpoi-Goa, on 30/01/2011. The Batch consisted of 26 recruits and they underwent training from 02/08/2010 to 30/01/2011 at Forest Training School, Valpoi-Sattari-Goa.

The Chief Guest on the occasion was Addl. Principal Chief Conservator of Forests, Dr. Shashi Kumar, IFS. Other dignitaries present on the dais were Shri. Yogesh I.F.S., Chief Conservator of Forests, Shri. F.X. Araujo, IFS, DCF & Ex-Officio, Director of Forest Training School and Shri. Vikas V. Dessai, Principal, Forest Training School, Valpoi-Goa.

APCCF Dr. Shashi Kumar addressed the trainees and stressed on the importance of training. Chief



Left to Right :- Shri. F.X. Araujo, IFS, DCF, Shri. Yogesh, IFS, CCF, Dr. Shashi Kumar, IFS, APCCF, V. Khawlhing, IFS, CF, Shri. Vikas V. Desai, Principal, FTS

Conservator of Forests, Shri. Yogesh, also addressed the gathering. Shri. F. X. Araujo, DCF welcomed the guests. Shri. Vikas V. Dessai, Principal, Forest Training School, read the report of Forest Training School activities. Shri. Pranay Naik, Deputy Range Forest Officer was the anchor and Shri. Mohanlal G. Phadte, Range Forest Officer, proposed the vote of thanks.

DISTRICT LEVEL WORKSHOPS ON BAMBOO MISSION



Left to Right: Shri. Vikas Desai, Principal, FTS, Shri. M.K. Shambhu, IFS, DCF, Shri. P.V. Sawant, Retd. CCF, Shri. F. X. Araujo, DCF

Two District Level workshops were conducted, one at Ponda in North Goa on 13/01/2011 and another at Margao in South Goa on 14/01/2011, under National Bamboo Mission Programme conducted through Bamboo Mission Society Goa.

The Resource persons on the occasion were Shri. P.V. Savant, IFS., CCF. Mizoram, retd., Shri. F.X. Araujo, IFS., D.C.F., Research & Utilisation



During the field tour to Ghotmod nursery

Division, Margao, Shri. N.D. Naik, ACF, Shri. Vikas V. Dessai, Principal, Forest Training School, Valpoi-Goa. The workshop was attended by 150 participants from all over Goa. The workshops were inaugurated by Shri. P.V. Savant, IFS, CCF. retd. A field tour was also conducted at Ghotmod Nursery and Satpal Arboretum of Forest Departments as part of the workshops.

History of Goa has seen many ups and downs and the present map of Goa came into existence in 1791. Before Liberation and during Portuguese rule the Forest Department did not exist and the forests were managed as part of Revenue Department through "Chef de Mata" (Chief of Forest). Basically selection felling "sec-a-cait" was done as a part of Management. After Liberation of Goa in 1961, scientific management of forests started in 1962, the year Forest Department came into being and was headed by Shri. P.M. Taggarse the then Conservator of Forests from Karnataka Cadre.

Since the creation of department and Goa having statehood in 1987, lots of developments have taken place in the administration and management of Forest Department. Now the department is headed by the Addl. Principal Chief Conservator of Forests of AGMUT cadre of Indian Forest Service supported by the Chief Conservator of Forests and two Conservators of Forests. Another major development is, creation of Goa Forest Development Corporation in the year 1997 with a basic mandate of Management of cashew and rubber plantations raised by the department.

For the outsiders coming to Goa as tourists, Goa is a land of sun, sand and sea but I will say that it is more than that as far as its biodiversity, flora and fauna is concerned. As per record Goa is having 1224.46 km² Government Forest which is 33% of total geographical area (3702 km²). By legal status, 237 km² (19.4%) is under reserved forests, 723 km² (59%) under section 4 of the Indian Forest Act, 137 km² under section 18 of Wildlife (Protection) Act and balance about 128 km² is unclassed forest. In addition to this approximately 200 km² was Private Forest, making a total of 1424.46 km² which comes to 38% of geographical area of State. It is worth mentioning that as per directives of Hon'ble Supreme Court State had constituted two Committees viz. Sawant and Karapurkar Committees, and the major work of identification of Private Forests has been completed by these Committees followed by survey and demarcation by

the Department. Now, again the remaining work is being done by two Committees constituted for the respective divisions viz North and South Goa Divisions.

As per latest State of Forest Report, published by Forest Survey of India, Government of India; Goa is having 2164 km² of forest cover which is 58.45% of the geographical area of the State. Out of this, 55 km² is very dense and having crown cover more than 70%, 1095 km² is moderately dense (having crown cover 40-70%) and 1014 km² is open forest (having crown cover 10-40%).

Tree cover of Goa has also been estimated by Forest Survey of India and based on the inventory carried out in one of the districts of the State between 2002-06 the estimated tree cover of State comes to be 268 km² i.e. 7.24% of geographical area. Tree cover and forest cover putting together works out to be 2432 km² constituting 65.69% of the geographical area. Even in case we place Goa in the category of hilly states, the state meets the criterion of having 66% of geographical area under Tree and Forest cover as laid down in the National Forest Policy.

In addition to forestry scenario given above it is to mention that U.T. of Goa had one National Park, one Bird Sanctuary and three Wildlife Sanctuaries viz. Mollem National Park, Dr. Salim Ali Bird Sanctuary, Bhagwan Mahavir Wildlife Sanctuary, Bondla Wildlife sanctuary and Cotigao Wildlife Sanctuary. However, two more wildlife sanctuaries namely Madei and Netravali were created in the year 1999-2000 adding up an area of 419 km². Presently, State of Goa is having seven Protected areas including national park and sanctuaries. Details of these as per area and locations are given below:-

Name of the Sanctuary	Area in sq. km.	Location (Taluka)
1. Mollem National Park	107	Sanguem
2. Bhagwan Mahavir Wildlife Sanctuary	133	Sanguem
3. Cotigao Wildlife Sanctuary	86	Canacona
4. Bondla Wildlife Sanctuary	8	Sanguem/Ponda
5. Dr. Salim Ali Bird Sanctuary	2	Tiswadi
6. Madei Wildlife Sanctuary	208	Sattari
7. Netravali Wildlife Sanctuary	211	Sanguem
Total	755	

This total 755 km² of protected forest area constitutes 62% of the recorded (1224.46 km²) forest area of the state and 20% of geographical area of State which is far more than many other States of India. This way whole of the forest area falling in Western Ghat region of the Goa is now under protected cover.

The Western Ghats are internationally recognized as a region of immense global importance for the conservation of biological diversity, besides containing areas of high geological, cultural and aesthetic values. A chain of mountains running parallel to India's western coast, approximately 30-50 km inland, the Ghats traverse the States of Kerala, Tamil Nadu, Karnataka, Goa, Maharashtra and Gujarat.

A significant feature of the Western Ghats is its exceptionally high level of biological diversity and endemism. The Western Ghats mountain chain is recognized as one of the world's eight 'Hottest Hotspots' of biological diversity. Global Biodiversity Hotspots have been defined as areas with over 1,500 vascular plant species (more than 0.5% of the world's total) as endemics, and with 30% or less of the original vegetation remaining. In terms of plant diversity, the Western Ghats harbour approximately 5,000 species of flowering plants, belonging to nearly 2,200 genera and 217 families; about 1,700 (35%) are endemic.

Several "Devarais" or Sacred Groves ranging from less than 1 hectare to over 10 hectares scattered all over, along or near the main mountain range sustain almost undisturbed evergreen vegetation and serve as a refuge for characteristic endemic life forms in Goa.

The vegetation is quite high due to the abundance of second storey trees with dominance of lianas, vines, thicket of cane, bamboo brakes in the opening and along edges. Rich sciophytic vegetation includes algae, parasitic fungi and spermatophytes. Epiphytic mosses, liverworts ferns and orchids as well as terrestrial ferns abound in number and diversity.

Goa's section of Western Ghats runs roughly North to South in an arc of hills whose 125 kilometers long crest line constitutes the eastern border with the

neighboring State of Karnataka. The average elevation is 800 meters, several hundred meters lower than the adjoining sections to the North and South. This physical feature gave rise to the expression "Goa gap".

The series of gaps have resulted in preventing the spread of certain species and have hence, facilitated local speciation and endemism.

The entire stretch of the 'Goa Gap' of the Western Ghats covering an area of 745 sq. km., within the talukas of Sattari, Sanguem, Ponda and Canacona forms the protected areas network of Goa State. It is contiguous with the forests/ sanctuaries/ N.P. of Maharashtra in North and that of Karnataka in the East and South, forming important corridor for wild animals in the region.

The State of Goa is the smallest of all the States in the country yet, it shows an astonishing diversity of endemic species, habitats and ecosystems. Goa is under the influence of two global biomes-the marine biome of the Arabian Sea and the terrestrial forest biome of the Western Ghats. Within this geographical canvas are a wide range of ecosystems and habitats e.g. forests, ghats, alluvial plains, coasts, rivers, estuaries, mangroves and wetlands, etc. The eco-physiology of the habitats is governed by complex ecological and meteorological conditions. There are normal habitats and extreme habitat (like the rock pools and the salt pans). There are microhabitats also which are equally important. The status of biodiversity in each of these habitats vary, depending on a variety of genetic and environmental factors.

Goa's flora includes 30 species of virus, 150 of Bacteria, 156 species of freshwater and 50 of marine Algae, one Gymnosperm and 1750 species of Angiosperms. Its fauna is characterized by 10 species of Nematoda, 112 of Arthropoda, 82 of Crustacea, 28 of Bivalvia, 63 of Gastropoda and 2 of Cephalopoda. Among Vertebrates; 205 of Pisces, 49 of Reptilian, 357 of Aves and 45 of Mammalia.

Being a storehouse of diversity and richness of flora and fauna, Goa represents the Gene pool for posterity.

NEW ARRIVALS IN BONDLA ZOO



Birth of Sloth Bear Cubs in Bondla Zoo

It was Joyous moment for Bondla Staff and Goa Forest Department, when Female Sloth Bear housed in Bondla

Zoo delivered one female & one male cub on 16th November, 2010. A pair of sloth bears was brought to Bondla from Nehru Zoological Park, Hyderabad in March 2010, in exchange for one pair of Indian Bison. The behavior of the pair was studied. Accordingly, changes in diet & housing were made for successful breeding. This is the first time in the history of Bondla Zoo that sloth bear has been bred in captivity. Cubs are presently housed in feeding chamber and are released for public viewing when there is less disturbances so as to avoid any nervousness among mother or cubs. The cubs are very playful and are attracting crowds to the Bondla Zoo.

Birth of Marsh crocodiles & Riverrine terrapins

The month of June also brought another good news for Bondla & Forest Department in the form of 13 hatchlings of Marsh Crocodiles (*Crocodylus palustris*) and 4 Hatchlings of Riverrine terrapin (*Melanochelyes trijuga trijuga*). The pair of crocodiles had laid eggs in artificially provided nesting spot or nest inside enclosure. After laying eggs it was observed that the female was jealously guarding eggs from other crocs as well as keeper. Accordingly, the nest was kept undisturbed. On 4th

June nine hatchlings came out of nest and were helped by mother crocodile to the pond and subsequently on 5th night another 4 hatchlings were born. Right now the



hatchlings have been separated from other crocs by accommodating them in separate enclosure where they are being cared for by their keeper. The Riverrine terrapins have also been bred in captivity with success of 4 hatchlings. They are also separately housed and are being looked after by their keeper.

TRAINING OF DIRECT RECRUIT FOREST GUARDS

The training of XXXIst Batch of Direct Recruit Forest Guards started from 14/02/2011 in Forest Training School, Valpoi. The Batch consists of 27 direct recruit Forest Guard and will be undergoing training in different aspects of Forestry for a period of six months.

The course was inaugurated on 16/02/2011 at Forest Training School, Valpoi-Goa. The Chief Guest on this occasion was Dr. Shashi Kumar, IFS, Additional Principal Chief Conservator of Forests.

The other dignitaries present for the function were Shri. Yogesh, IFS, Chief Conservator of Forests, Shri. F.X. Araujo, IFS, DCF & Ex-Officio, Director of Forest Training School and Shri. Vikas V. Dessai, Principal, Forest Training School, Valpoi-Goa.

The Chief Guest addressed the trainees and advised the trainees to protect the forest and work like social service to the society. Shri. F.X. Araujo, IFS, DCF, addressed the function and Shri. Mohanlal G. Phadte, RFO, proposed the vote of thanks.

WORLD ENVIRONMENT DAY, 2011 CELEBRATIONS

Centre for Environment Education (CEE) in association with the Goa State Pollution Control Board and Goa Forest Department and with the support from the Department of Science, Technology and Environment celebrated World Environment Day, 2011 with the theme "Forests: Nature at your Service" on 5th June 2011, at the International Centre, Dona Paula.

Hon. Minister for Environment, Government of Goa, Shri Aleixo Sequeira was the Chief Guest and inaugurated the programme by lighting the lamp. Along with him Dr. Shashi Kumar IFS, APCCF, Goa Forest Department, Dr. Simon D'Souza, Chairman, Goa State Pollution Control Board and Mr. Sujeetkumar Dongre, Dy. Programme Coordinator (CEE) were present on the dais.

Hon. Minister for Environment in his address reiterated the importance of forests in maintaining the ecological balance and thereby protecting the environment. Shri Sequeira also informed that Goa is the only State to have special status in CRZ 2011 which makes it mandatory to protect the mangrove ecosystem. He further opined that it is important that all stakeholders come together to find solution them for the environmental problem and work towards solving it. Any suggestions and corrections to be made in policy implementation regarding the environmental protection, are welcome and his Ministry is ready to accept such valid suggestions and implement them for the betterment of State's Environment and Forests. The Hon. Minister interacted with the audience and addressed some of the questions. Questions were related to Solar Power use in Goa, waste management and rain water harvesting.

Dr. Shashi Kumar IFS Addl. PCCF Goa Forest Department made a key note address wherein he stressed on the importance of forest and its conservation values. He congratulated the people of Goa for being more vigilant and concerned about forest protection. He informed the gathering that the Goa Forest Department was conferred with Indira Priyadarshini Vruksha Mitra Award for the year 2008.

Dr. Simon D'souza said that forests play a very important role as carbon sequester thereby reducing impact of Global Warming and Climate Change.

Mr. Sujeetkumar M. Dongre, Dy. Programme Coordinator spoke about the importance of World Environment Day and the theme "Forests: Nature at your service". He informed the gathering that Government of India has initiated CAMPA and Green India Mission to improve and protect the forest cover.

The inauguration was followed by a technical session on the role and efforts being put by the Forest Department, Government of Goa in protecting the forests in Goa. A presentation was done by Shri Debendra Dalai, IFS, Dy. Conservator of Forests. In his presentation he informed the gathering that various activities like education, awareness, wildlife rescue, monitoring and research work in Forestry are being carried out in the State of Goa. He urged the



Left to Right: Dr. Shashi Kumar, IFS, APCCF, Shri. Aleixo Sequeira, HME, Dr. Simon D'Souza, Chairman, GSPCB, Mr. Sujeetkumar

public to support the department in protecting forests.

During the event, four films pertaining to Forests and Man, Tiger and Green Economy were screened. An interview of Hon. Union Minister for Environment and Forests, Govt. of India, Shri Jairam Ramesh on the occasion of World Environment Day, 2011 was also screened.

Altogether 135 participants from various backgrounds and professions attended the event.

Xant Bebo

By
Cirilo L. Noronha
Forest Guard

Poilo paus gosgoxeancho
Nentteam ballank moujecho
Vingllea angar nhaupacho
Bebeam pattlean dhanvpacho

Poili rat pausachi
Vhoddleam bebank lognachi
Dhaktteam bebkank songitachi
Ani amkam zalear ruchichi

Bebeam sangatim purvozamnim
Hozar vorsam sarlim
Bebe xetamni bebe bhattamnim
Tech bebe aiz xiztat kuneanim

Mere degek pausan bhizun
Gima vellar burkant lipun
Bhumi porivoronn sambhaltale
Guptim monxa seva kortale

Zollari kimsam khatalo
Udkan nivoll kortalo
Malaria - antlim nivartalo
Xant bebeak kobar kelo.

Abbreviations used

ACF	=	Assistant Conservator of Forests
APCCF	=	Additional Principal Chief Conservator of Forests
CCF	=	Chief Conservator of Forests
CF	=	Conservators of Forests
CS	=	Chief Secretary
DCF	=	Deputy Conservator of Forest
FG	=	Forest Guard
FS	=	Forest Secretary
FTS	=	Forest Training School
HCM	=	Hon'ble Chief Minister
HME	=	Hon'ble Minister of Environment
HMF	=	Hon'ble Minister for Forests
IAS	=	Indian Administrative Service
IFS	=	Indian Forest Service
MLA	=	Member of Legislative Assembly
RF	=	Round Forester
RFO	=	Range Forest Officer
WLS	=	Wild Life Sanctuary
GSPCB	=	Goa State Pollution Control Board

Answer to the poser of the last issue.



Answer :- Inflorescence of *Acacia catechu*

Poser of this issue



Identify the animal in the picture.
Answer may be sent to the Editorial board.