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MARINE TURTLE CONSERVATION AND MANAGEMENT: A SURVEY OF THE SITUATION IN WEST BENGAL 1981/82 AND 1982/83

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Introduction

In spite of the promulgation of the Indian Wildlife (Protection) Act 1972 and the protection accorded to sea turtles, fishermen and traders from West Bengal and Orissa have been carrying trade on turtles resorting to poaching from the inshore fishing grounds along Orissa-West Bengal, not sparing the turtles even during mating season off Gahirmatha, Orissa State. However, during the last two seasons, the West Bengal and Orissa Forest officials have taken constructive steps, though inadequate, to prevent turtle poaching and marketing. To create public awareness the regional and national dailies have been publishing articles on sea turtles with a stress on conservation.

Turtle poaching at various centres

Midnopore District, West Bengal

The fishermen from Midnapore District used to arrange organised capture of marine turtles from the fishing grounds of Orissa. During 1981-82 season it was estimated that 15 fishing units, each unit comprising of a motor launch with 6 country crafts were deployed from Digha. Each unit captured about 6000 numbers during the season. During the 1982-83 season the scale of poaching of turtles was reduced to a great extent due to the vigilance by the Forest officials. It was estimated that from mid-December 1982 to end of February 1983 about 10,000 live turtles were clandestinely landed at Bhanshalghat from where they were transported to Calcutta and Tatanagar for marketing. Thus, the 1982-83 season saw a reduction in the catch by almost 90% over the previous season.

At Digha

On 14th and 15th December 1982 a team from Central Marine Fisheries Research Institute visited Digha and adjacent areas to study the situation. On 15.12.'82 at the Digha fish landing centre, live olive ridley were detected in two sheds. The first shed was located on the western side of the landing centre, where 34 turtles (14 males and 20 females) were kept. The second shed was located on the eastern side of the landing centre where 25 live turtles (10 males and 5 females) were dragged along the beach and kept for transport to the market. The turtles measured (in cm)

Males :	Carapace length 67-72 Plastron length 50-54	Carapace width 56–68 Plastron width 42–50
Females :	Carapace length 65-69 Plastron length 49-59	Carapace width 54-64 Plastron width 40-54

The live turtles weighed between 30 to 40 kg and was for sale by the fishermen to the traders at the rate of Rs. 40 to 50 per animal at the landing centre.

On the same day, Sri. A.K. Basu, Forest Beat Officer, West Bengal Forest Department on a surprise inspection of this centre, confiscated the 59 turtles from the two sheds and arranged for their release into the sea. At Digha beach, on 15.12.1982 in a two km stretch more than 12 dead turtles were noticed. Dogs were eating the flesh from the carcasses which had been freshly washed ashore, apparently 'drowned' as a result of entanglement in the gill nets operated along the coast.

When the team visited Digha on 1st February 1983, 11 live turtles tied by ropes and 57 dead turtles strewn along a 3 km stretch of Digha Beach were noticed. The latter were undoubtedly part of the incidental catch in the gillnet fishery and were discarded in the sea' by fishermen and washed ashore, while the live ones were brought to shore in boats for trade. The team visited Digha again in the last week of February '83. At that time neither live turtles nor freshly washed ashore dead turtles were noticed. About 25 decomposed carcasses of olive ridley were seen at the landing centre of which 9 were seen with their flippers tied together with nylon ropes. The measurement in cm were as follows:

Carapace length 57-67 (63.0) Carapace width 48-61 (57.1) Plastron length 48-58 (54.1) Plastron width 45-52 (47.0)

On 20th February '83 at Digha Muhana landing centre, the team noticed about 15 carcasses of olive ridley of which five had their flippers tied together with nylon ropes. The measurements in cm of the specimens were:

Carapace length 63-71 (66.7) Carapace width 53-65 (58.6) Plastron length 55-61 (58.3) Plastron width 48-53 (48.7)

At Bhankshalghat

Bhankshalghat is located on the banks of a creek 20 km away from Digha and 7 km to the interior from sea coast. Due to the vigilance of the forest officials at Digha, the fishermen resorted to transporting the turtles to Bhankshalghat during nights through the creek in boats and from there to Calcutta by trucks. On 19.12.'83 the team observed 15 fresh carcasses of male and female olive ridley at Bhankshalghat measuring (in cm):

Carapace length 59-70 (64.2) Carapace width 49-64 (57.7) Plastron length 49-59 (57.1) Plastron width 45-51 (47.5)

As already mentioned, during 1982-83 season Bhankshalghat was the most active centre for this nefarious trade. The possibility in future of turtles being transported through the creeks to landing centres in the interior cannot be ruled out.

Turtle sale at Calcutta markets

As a result of the preventive measures taken by Orissa and West Bengal Forest officials during the 1982-83 season the number of turtles transported to Calcutta markets had diminished to a few thousands from about 90,000 to 100,000 during the previous season.

Date	Place	Number of olive ridley noticed in Calcutta markets		
20.12.1982	Howrah	165		
22.12.1982	Shealdah	58		
23.12.1982	Howrah	134		
7. 1.1983	Howrah	35		
13. 1.1983	Howrah	27		
24. 1.1983	Howrah	50		

The weight and selling price of turtles varied from 30 to 45 kg and from Rs. 110 to 160 per turtle respectively.

The West Bengal Forest officials were also active in booking offences under the Act of illegal transport of turtles. On 21st December 1982, a truck which was transporting turtles was caught near Narghat and the vehicle and the persons involved were produced before the Subdivisional Judicial Magistrate, Contai. In this case, 90 turtles were recovered and they were released back into the sea at Junput. Totally three such offences were registered against transport of turtles by the West Bengal Forest officials at the Subdivisional Magistrate court, Contai between 17.12.82 and 28.12.82. This action no doubt had some deterrent effect but the effort will have to be vigourously pursued in future with wider publicity on conservation programme on turtles to make the system more effective.

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Table 1.	Details of marine fishing villages and fishermen popu-
	lation in Midnapore District, West Bengal

Number of villages	148
Number of fish landing centres	19
Number of fishermen households	5028
Fishermen population	
a. Male	11442
b. Female	9515
c. Children	12970
Total	33927
Educational Status	
a. Primary	7112
b. Secondary	1351
c. Above Secondary	116
Total	8579
Number of fishermen engaged in actual fishing	
a. Full time	6034
b. Part time	2114
c. Occasional	265
Total	8413

 Table 2.
 Mechanised and non-mechanised marine fishing crafts and gears in Midnapore District, West Bengal

Number of fishing crafts:	• .			
Mechanised gillnetters				57
Others				15
Total				· 72
Non-mechanised				
Plank built boats	· .	*		1130
Dug out canoes				2
Total	4		• .	1132
Number of fishing gears:				
·Drift/Gill nets				437
Fixed bag nets				2752
Hooks and lines				60
Shore seines				97
Scoop nets				82
Others				1864

Fishermen population and infrastructure facilities

In the All India census conducted during 1980 by CMFRI, information on the fishermen population and the infrastructure facilities available in the major fishing centres along West Bengal Coast has been collected and is briefly as follows.

The six districts of West Bengal comprise 303 fishing villages and most of them (148) are in Midnapore District. Fishermen from Midnapore District operate their boats along the Orissa Coast. The total number of fish landing centres in Midnapore District is 19. Of the 14000 fishermen households the maximum number (35%) is in Midnapore District. The total sea going fishermen population in West Bengal is about 84000 of which Midnapore District accounts for 41%. The number of fishermen engaged in actual fishing forms 24% of



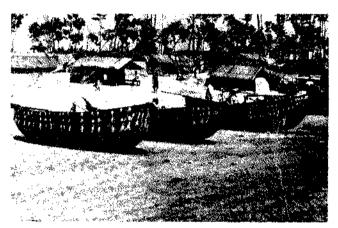
Fish landing centre, Digba a noted place from where hundleds of further used to be sent to Calcutta market.



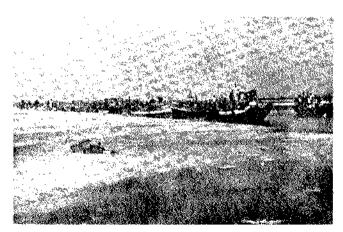
Ire packing of fishes to be transported to Calcutta market.



Gill nets being dried at Digha lish landing centre.



Fishing canoes at Digha fish landing centre.



Fishing travéets or Digho Muhana fish Emding centre

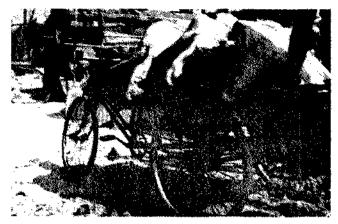


Fish Londing centre, Bhankshalghaf 7 km from the sea, from where truck loads of turtles used to be sent by road to Calcutta market.

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Temporary shed for the olive ridley at Digha fish landing centre for illegal transport to Calcutta market as on 15-12.1982.



Easy way of transporting from fishing boats to turtle shed by cycle rickshaw, the hard beach surface facilitates this transport.



Turtles being lifted bodily from rickshaw to the shed.



Turtles being dragged from the rickshaw to the shed.



Scene of unties kept supme in the shed enclosure



Turfley awaiting transport at the beach.



One more surfle shed at the western side of Digha fishlanding centre located on 15-12-82.



Piglit of protected tirtles in the hands of illegal traders



Thicly and prompt check by Forest officials of Govt of West Bengal.



Turtles being carried as head inad to be,rejeased back into the sea



Olive ridley on way back to see owing to the vigilance of Jarest officials of West Beogal



Release of olive nulley in the presence of CMFRF and Forest Department officials

28



Sign board at Eurest Department office, Contai notify ing Wildlife Protection Act.



Dog licking the blood of treshty washed ashore office index at Digha Beach.



Turtle washed ashure at Digha tish landing centre.



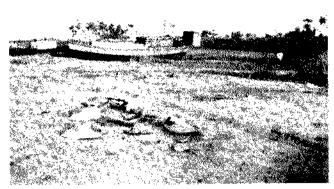
Does teeding on the carcasses at Digha Mithana fish landing centre.



At Digha fish landing centee,



At Bhankshalghat



Discarded carapaces of olive ridley seen during the last week of February '83 at Bhankshaighad



Remains of carapaces at Bhankshalghat – remainder of 1982–83 season



Carcewes at Digha Muhana seen during the last week of February 183.



Carcusses at Dight fish forming concre-



Remains or region rope around dippers and carapace to help transport of funder from Gabirovatha to Digba

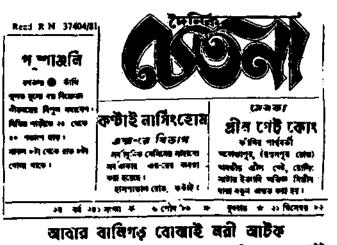


Close up view of Repress fiel with tylon tope at Digha

the total fishermen population. In the Midnapore District as much as 72% of the fishermen engaged in actua fishing belong to the full time category and only 25% come under the part time category.

In this State the number of mechanised crafts owned by fishermen is 310. Out of this, gillnetters constitute 80%. The number of mechanised boats in Midnapore District is 72. Gillnetters form the maximum number (57), there being only 15 carrier boats. Midnapore District has 28% of the 4100 non-mechanised boats recorded in West Bengal. Of the 6200 fixed bag nets recorded in West Bengal 44% is found in Midnapore and of the 2500 drift/gill nets 18% are recorded from Midnapore. Details of marine fishing villages and fishermen population of Midnapore are given in Table 1 and the details of marine fishing crafts, and gears in Midnapore are given in Table 2.

The information on the census of fishermen and craft and gear should enable an objective regulatory programme to be developed in case any restriction on fishing activity is contemplated. Any such action should not affect the artisanal fishermen for whom alternate seasonal avenues of work and source of income may have to be properly planned. This will call for a special study of the artisanal fisheries of this particular area extending From Midnapore Coast in West Bengal to Paradeep in Orissa. The CMFRI is already aware of this problem and is initiating a survey to be followed up later by a more detailed study of the socioeconomic aspect of the artisanal fisheries and the impact of cessation of the seasonal turtle fishery along the coast.



া বেয়া হয়। গাইটি গানায় খাইক কথা হয়েছে। নাযুনিক কথা-গুৰি ভূনপুটো নাযুনে যেছে গেয় হয়েছে। হংজ্যাকা 3 নির্বাচেম বালিবাট ১১ ভিনেয়ে, নাম এবানে রামনগর এক হা ও বং গ্রন্থে পুরু বেয়নির কেয়ারেন্দের বাঁ কি নারেন্ন

APPENDIX J

"DAINIK CHETANA" dated 22.12.1982

(Bengali Daily published from Contai)

Lorry loaded with sea turtles is seized again Dated 21st Dec. 1982

Again a lorry illegally loaded with sea turtles is caught. Now the place of incidence is Narghat.

Today early in the morning a truck loaded with sea turtles was caught at the Forest Department Check Post by employees on duty. There are 90 sea turtles in it. Some people created objections when the lorry was brought to Contai from Narghat. The situation came to control after the arrival of police officials. The transported turtles along with the driver and his assistant were produced before the Subdivisional Judicial Magistrate, Contai. The driver and his assistant were released on bail after the payment of Rs.500/-. The vehicle was seized and the sea turtles were released back into the sea at Junput. 1 24-44 25041

रालिगङ् এथता

ধরা হচ্ছে

২ জান্দখারী, শৌলা, হরিপুর, পুরুষোস্তমপুর, জ্বনপুট ও বার্কশাস প্রভৃতি ঘটিতে সরকারী বিধি নিশেষ অগ্রাহু করে অখনও বালিগড় ধরা হচ্ছে। বাঁকশংশে এক বাবসারী গোপনে বালিগড় চার্নান দিতে িরে করেক বার ধরা পড়েছে। এ বিষয়ে হানীয় পুলিশ প্রশাসনকে জানানো সত্বেও কোন বাবস্থা গৃহীত হরনি বলে প্রকাশ।

"DAINIK CHETANA" dated 3-1-1983

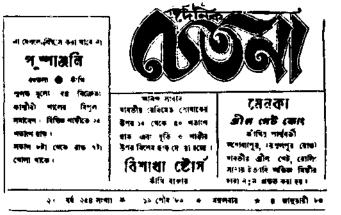
(Bengali Daily published from Contai)

Sea turtles are being caught even now

Dated 2nd Jan. 1983.

Even now sea turtles are being caught at Saula, Haripur, Purushottampur, Junput and Bankshalghat by defying Government ban. A businessman was caught several times during his attempt to transport sea turtles secretly. It is reported that no action is being taken by local police although they have been informed.

APPENDIX III



খেজুরী উল্লয়ণ পরিষদ

কাৰি মহনুমান তথাগত: গুপৰীল জাতি বসতি বুক্ত থানা। ভাৰীনতায় পৰেষ ৩০ বছৰে ৰডগুলি নিৰ্বাচন গুয়েছে প্ৰতিবাহেট উ এলাৰা তপলীল ছাতি মিৰ্বাচনী এলাৰা বলে সংগ্ৰিছ খেৰেছে। এব প্ৰতিবাহেট ৰাঙাবিক ভাবে গুপলীলকাতি হুক্ত প্ৰাই কয়ী হয়েংগ। একৰাৰ বাগে। কংগ্ৰাস, একৰাৰ কৰতা ৩ একবংৰ মায়ক প্ৰাই উ নিৰ্বাচিত হয়েছেম।

बालब जककाल (र-जाइँमी सारमा

এজালুবারী, বহুদিনের ব্যক্তে সমূরপুথ থেকে একট লাইকে বালিবছ পাচার করার সময় – রাগ্রেক্ত এগরে বাধকাছী ও চলক বরা পাছে । করের কার্কিকে ডিনাপা লবর টাব্য দিলে পরীন্দ হায়া পাছ ধনে সংবাদে প্রকাশ পারে পিছাধনী বান টাকে মারার লইটেকে মাটক করা হয় । দেবাদেও জনের প্রভাব-শালী বার্কিকে সাহশো টাও। উৎকোচ বিলে পরীটি বারা পাছ । হারীয় বারিল্যাকের অর্থেরেশের সায়ুরিক কছল হকাদ বছ হণ্যা সংস্কৃৎ ব্যান্ডৰ অর্থেরে যে মাইনী বাবলা কলাও ভাবে লগেছ ।

কিছ বলের রাইন পিয় ধান্যা হশ্য হাজ খেণুনীৰ সাৰ্বিক फेन्स्स **अवल्य प्रस**्डनिड খেছৰীকে প্ৰৱেশ্যন মানক কিছুটা চাই খুন নিগ্লীয গেছৰীয় সংবদ্ধণ মাতৃৰ আৰ an-an-a. an, fit-mi sing নির্মান নামাম⊸নি লোবে ব राग्रेश उनी देवान गरिवन গঠনের কথা ভারছেন । এখন ওষু ভাৰনাৰ আয়ই আছে। स्टेनस प्रत्यक्ष (जान अस्ट्रम শনিক্ষ কান্যদেন থাগাতেও केशा (करन मांत करेंके मांगे) fice an user a de Mit-बहर अक्षरताः समय मारी

"DAINIK CHETANA" dated 4.1.1983

(Bengali Daily published from Contai)

Irregular business in the darkness of night

Dated 3rd Jan. 1983

A businessman and the driver were caught when they tried to transport turtles in the night of Christmas day. It is reported that the lorry was released on payment of Rs.370. The lorry was again stopped at Pichabani bus stand and a bribe of Rs.750 had to be given to an influential man to release the lorry. The local inhabitants complained that illegal business is flourishing well in the darkness of night although capturing of sea turtles is prohibited.