

Conference on Conservation of Biodiversity for Sustainable Development in Odisha



Organised by Odisha Biodiversity Board, one-day conference
on 22nd May, 2015 at Hotel New Marrion, Bhubaneswar, Odisha.

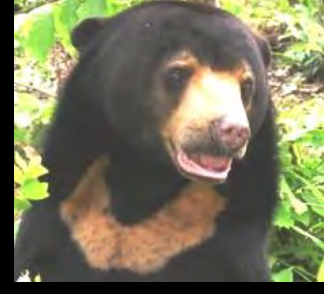
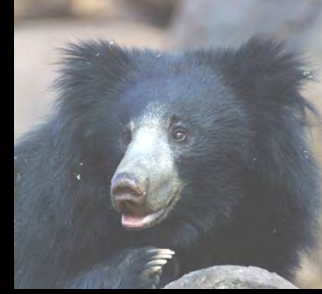
“Securing the future of highly problematic Sloth bear population in Nilgiri, Balasore.



Presenting by
Prakash Chandra Mardaraj
IUCN/SSC-Bear Specialist Group

Funded by





Bears

- The bear species currently exist in more than 60 countries on four continents.
- Ursidae are a small group of mostly large mammals with 8 species in 5 genera.
- Family Ursidae do not occur in Africa, Madagascar, Australia, Antarctica and various oceanic islands.
- Four species of bear have been reported in India, among 4 Sloth bear (*Melursus ursinus*) is endemic to the Indian sub-continent.
- Sloth bear is listed as 'Vulnerable', appendix I & placed in Schedule I of the Indian Wildlife (Protection) Act, 1972.

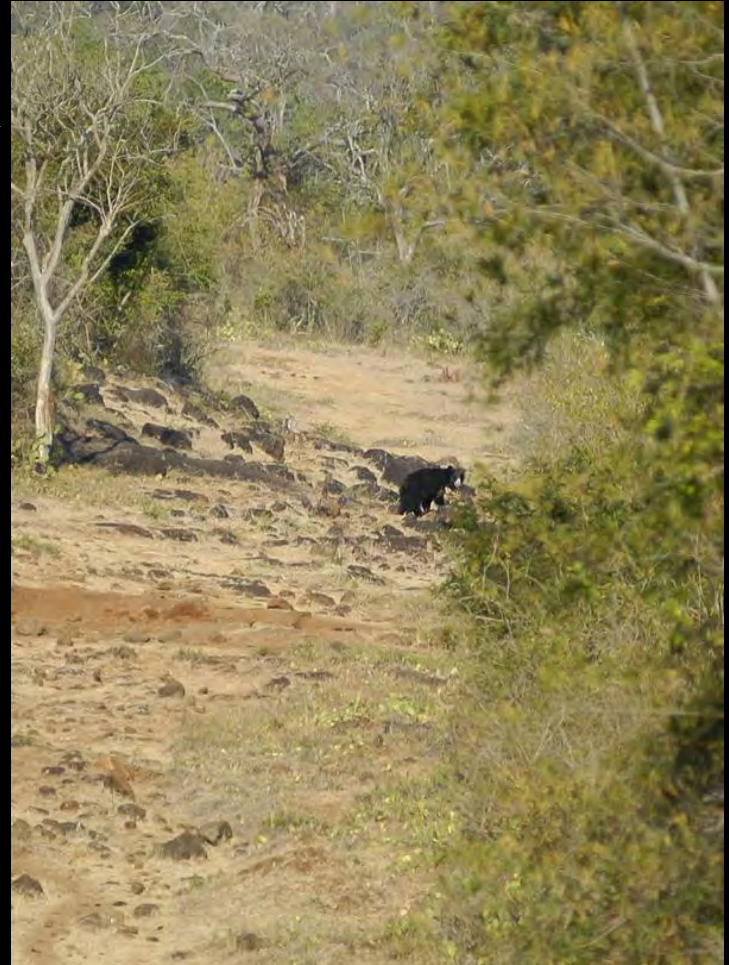
Sloth bear



- Presently in India, sloth bear is distributed in 19 different states of India, in total 174 protected areas (PAs), which include 46 (NPs) and 128 (WS).
- Sloth bears have long shaggy coat, a distinct broad, white 'U' shaped chest blaze, and their with Ears also have long hairs.
- Sloth bear is the only myrmecophagus bear. a nearly long & naked snout and nostrils which can be closed voluntarily.
- snout is mobile, the lips are loose, protrusible, mobile and bare. and they are missing of upper incisors.
- They have long (6-8 cm), curved, ivory-colored front claws, which are used for digging.

Significant

- Sloth bear has probably suffered as much as any large mammal from human impacts on forested areas
- Although sloth bear is one of the most widely distributed large mammal, yet little is known of its ecology and behavior.
- Effect of grazing by local and migratory livestock; settlement and demarcation; fuel wood cutting, minor forest produce collection.



Study area

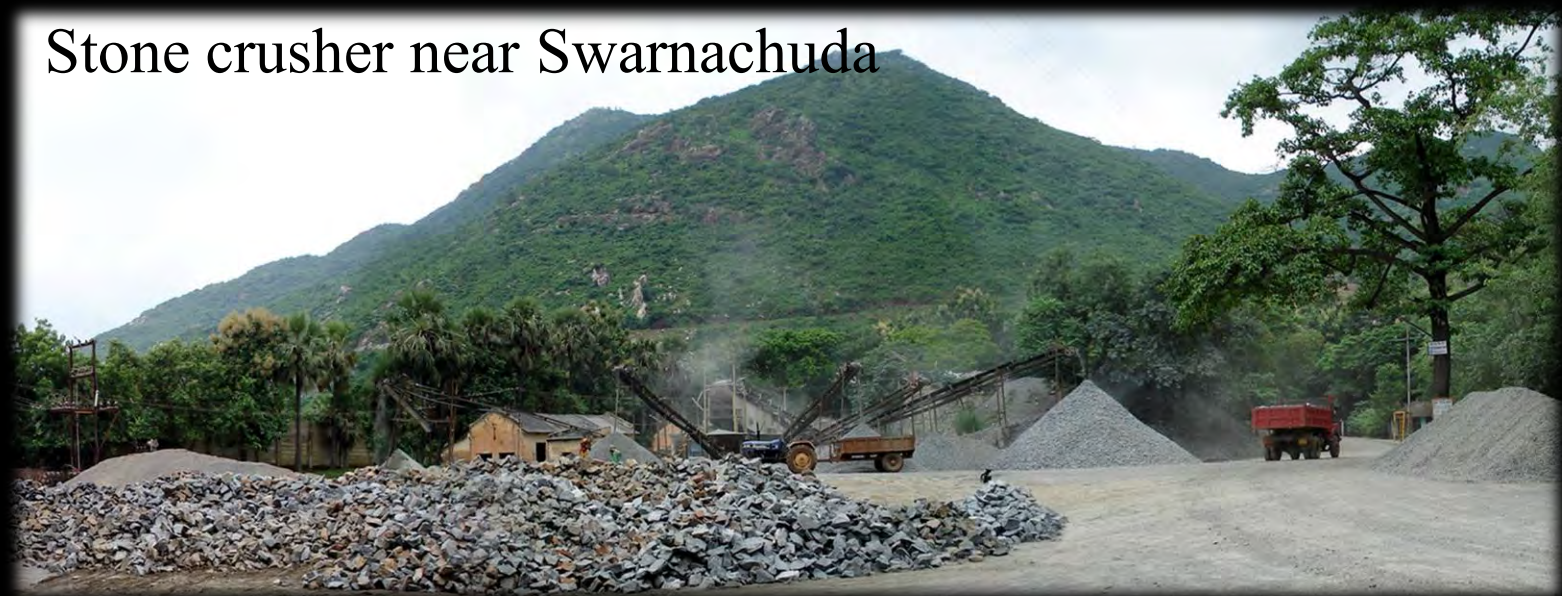
- The study focused on Swarnachuda Reserve forest in Nilgiri wildlife range, under Balasore wildlife Division, Odisha.
- The Mixed deciduous forest type provides a very good habitat for the sloth bear
- Swarnachuda reserve forest is surrounded by 18 villages.



Human bear conflict

The Sloth bear habitat in and around Nilgiri wildlife range is severely destroying by human interferences.

- Stone quarries
- Stone crushers
- Uncontrolled cattle grazing
- Lopping & cutting of trees
- Illegal encroachment and converting forest
- Collection of NTFP of bear interest



Fringe forest area cleared for depot



MFP collections



Fuel wood collections



Cattle grazing



Consequences

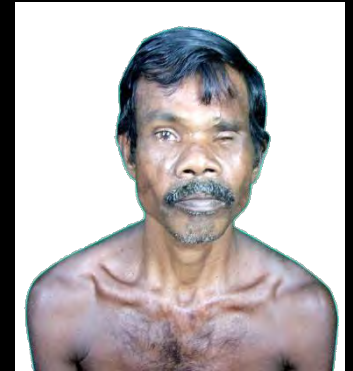
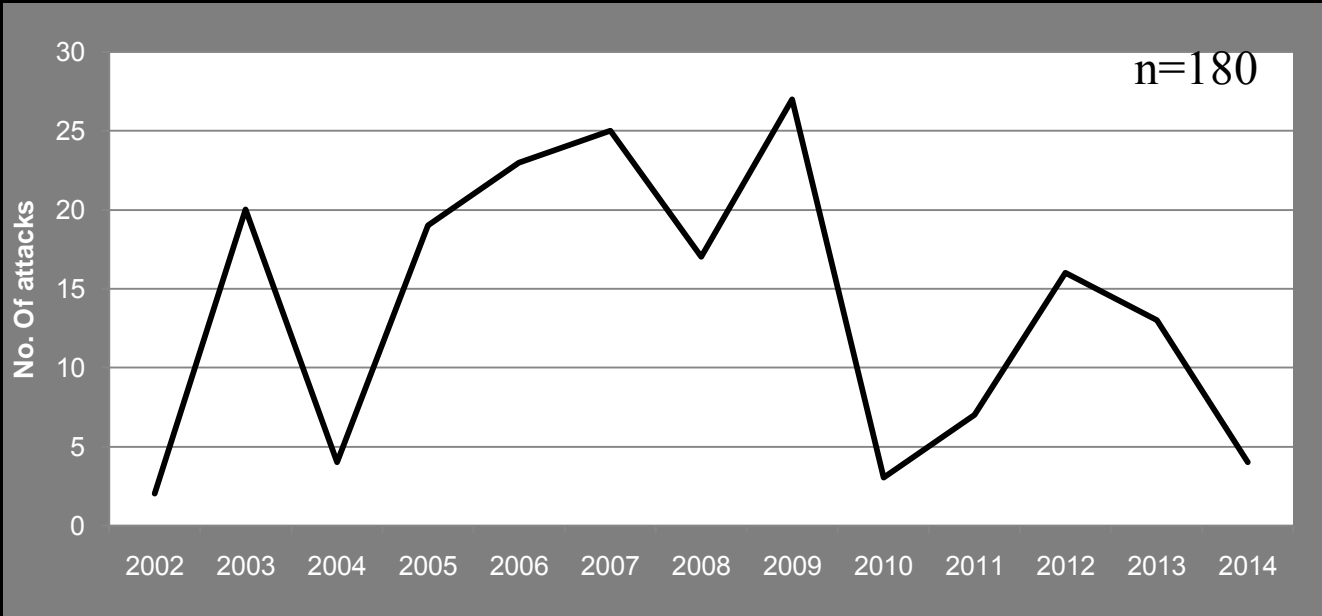


In search of food, bears frequently invaded human habitation, consequently arising of conflicts

- Human mauling and killing by the Bear
 - Bear killed in retaliation by people
 - Livestock killing (unusual)

Bear attacks victim

Between June 2002 to April 2015 there were 182 human attacks which includes 4 death cases.



Bear in local media

ମାଲୁସହ ଇଡ଼େଇ କରି ଗୁରୁତର ଅବସ୍ଥାରେ ଡାକ୍ତରଖାନାରେ ଭର୍ତ୍ତି ହୋଇଛନ୍ତି । ମାଲିଗୋର ପଞ୍ଚାୟତର ପୁରାଲ ଗାଁର ଜଳଧର ସେଠା(୬୧) ପ୍ରତ୍ୟୁଷକୁ ଗୋଟି ଚିକିତ୍ସା ପାଇଁ ବିଜ୍ଞ ଆଡ଼େ ଯାଇଥିବାବେଳେ ଏକ ଭାଲୁ ହାତୁଡ଼ିରେ ପଡ଼ିଥିଲେ । ଭାଲୁଟି ପାଞ୍ଚ ଆଉ ଦୁଇଗୋଟି ଡେଇଁ ଜଳଧରଙ୍କୁ ଆକ୍ରମଣ କରିବାକୁ ଚାହୁଁଥିବା ବେଳେ ଡେଇଡ଼ା ଡେଇଡ଼େ ଜଳଧର ଦୁଇ ହାତରେ ଭାଲୁର ଦୁଇଗୋଟିକୁ ଧରି ନେବା ପରେ ଶାସ୍ତି ଆରମ୍ଭ ହୋଇଥିଲା । କିଛି ସମୟ ଭିତରେ ଭାଲୁଟି ଡାକୁ ହାତ ପକାଇଥିଲେ ଏ ସେତେବେଳକୁ ଜଳଧରଙ୍କ ମୁଣ୍ଡ ଓ ଡାହାଣ ଗୋଟି କ୍ଷତାକ୍ତ ହୋଇସାରିଥିଲା ।

ଭାଲୁ ସହ ମଢ଼ ବୁଦ୍ଧ ଗୁରୁତର



ଭାଲୁ ଆକ୍ରମଣେ
୨ ଗୁରୁତର

ନୀଳଗିରି, ୧୭/୯(ଇମିସ): ରକ୍ତମୁଖ
ହୋଇ ଉଠିଛନ୍ତି ଭାରତୀୟ ଗଲର ଭାଳ

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ପଞ୍ଚୋପାସରେ ଭାଲୁ ଆତଙ୍କି
 ା ଆହତ, ୨ ଗୁରୁତର
 ପୁଲିସ୍ ଓ ବନକର୍ମଚାରୀ ନାକେଦମ୍

ପିତାମହଙ୍କୁ ବନ ବିଭାଗ ଓ ପୁରୀର ଉତ୍କଳ ନାଟ୍ୟକଳା
ଦେବା ନାଟକର ଅନ୍ତରାଳ ଦର୍ଶନ ବିଷୟ ହୋଇଛି
କାଳି ୧୦୮୩ ଯାଏଁ ଅଧିକାଂଶରେ ଗାଁ ମଧ୍ୟରେ
ନାଟକର ଚିତ୍ରରୂପ ଉଦ୍ୟମ କରିଥିଲେ ମଧ୍ୟ ଉଦ୍ୟମ
ମଧ୍ୟରେ ଗାଁ ଗିରିରେ ରହିଛି ।

ଆଜି ବଡ଼ ଲୋଭ ବାସନାରେ ସ୍ବର୍ଗରୁ ଚିତ୍ତ
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 ଲୋଭ ଚିତ୍ତ ବଢ଼ିଥିଲା । ଅନ୍ତେକ ବେଳେହେତୁ
 ଲୋଭରାଜାକୁ ଉଦ୍ଧାର କରିଥିଲେ । ମାତ୍ର ଲୋଭ
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ଜଙ୍ଗଲି ଭାଲ ଏବେ ଜନବସତିରେ

ଆକାଶରେ ଚିତ୍ରପ୍ରାୟ ଅଞ୍ଚଳର ଏ ଆହତ ; ୨ ଗୁରୁତର

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ଦିନ ଶାନ୍ତିରାଜ ପୋଷାକରେ ଶେଷ ସେଣ୍ଟିମେଣ୍ଟରରେ ମା' ଶ୍ରୀମତୀଙ୍କ ଅନ୍ତର୍ଗତ ହେଉଥିବା। ସେହିପରି ପୁଅ ଚିତ୍ତରାଜ ଶ୍ରୀମତୀଙ୍କ ସେବାରେ ଲାଗି ପଡ଼େ ଆଜି। ଶ୍ରୀମତୀଙ୍କ ସମ୍ପର୍କରେ ସ୍ୱାମୀଙ୍କର ସ୍ୱାଭାବିକ ଅନୁରୋଧ ଶ୍ରୀମତୀଙ୍କ ସେବାରେ ଲାଗିପଡ଼ିବା ଯେ ସ୍ୱାଭାବିକ ଅଟେ ବୋଲିଥିଲା। ଶ୍ରୀମତୀଙ୍କ ସ୍ୱାଭାବିକ ଅନୁରୋଧକୁ ମଧ୍ୟ ଶ୍ରୀମତୀଙ୍କର ସ୍ୱାଭାବିକ ଅନୁରୋଧ ବୋଲି କୁହାଯାଏ।

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ଭାଲୁ ଆକ୍ରମଣରେ
ମୃବକ ଗୁରୁତର

ନୀଳଗିରି, ୨୯।୫ (କମିସ): ଓପରା ବୁକ୍ ଅଧୀନ
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ଏହି ଆକ୍ରମଣେ
କ୍ଷତ ସୃଷ୍ଟି କରି
ଯୋଗୁ ଭାଲୁଟି
ପଳାଇ ଯାଇଥି
ନାଦିଗି ତା

ଭାଲୁ ଆକ୍ରମଣରେ ମହିଳା ଗୁରୁତର

ନୀଳଗିରି, ୨/୮ (ଜମସା):
 ଯୋଗୁଁ ଜଣେ ଆଦିବାସୀ ମହିଳା ଗୁଳି
 ଚିକିତ୍ସିତ ହେଉଛନ୍ତି। ଔପଚା ଗୁଳି
 ମଜୁର ଗାଁରେ

ସକାଳରୁ ଏହି ଦୁଇଟି ଶାସ୍ତ୍ର ପଢ଼ିବା ପାଇଁ
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ନିଜର ଜଳାଳ ଆବଶ୍ୟକ ପଳା
ପାଥମିକ ସାହାଯ୍ୟରେ ଓ ପଢ଼ିବା

କ୍ରମେ କରିଥିଲେ । ବୃଦ୍ଧଙ୍କ ଚିନ୍ତା
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ନୁ ବୃଦ୍ଧଙ୍କ ମୁଣ୍ଡ, ଜ୍ୟ ଓ ବାମ ହାତ
ଝିଆ ହୋଇଯାଇଥିଲା । ସେ ଏବେ ନା
ରେ ଚିକିତ୍ସିତ ହେଉଥିବା ଜଣାଯାଇଛି ।

ଭାଲୁ ଆକ୍ରମଣରେ ବୁଦ୍ଧ ଗୁରୁତର



Retaliation

- Four sloth bears were killed by the villagers in retaliation during 2002 till date
- These incidences can not only adversely affect the conservation efforts with respect to species but also its very nature, it is capable of negating the overall conservation aspect



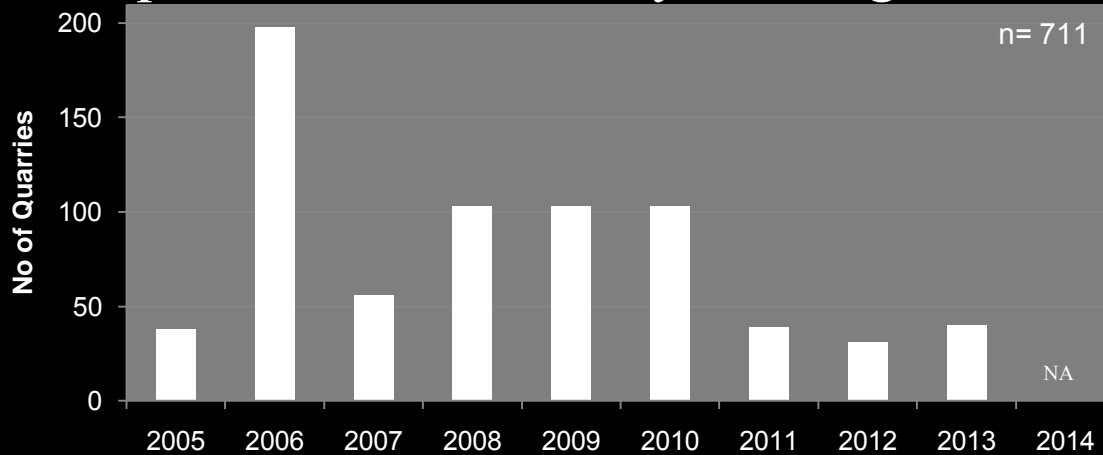
Livestock killing

- During 2009-10 some sloth bears were showing an unusual feeding behavior in Nilgiri Range.
- Bears were destroying chicken pens and coops and were also hunting goats and feeding on it
- 31 such cases were reported from the fringe villages of Swarnachuda reserve forest.
- The increase in predatory behavior of sloth bear is really a clue of increasing in human sloth bear conflict in the Range.



Quarries

Between the year 2008 to 2010 more than 100 quarries were actively running



Results

- Since 2002 the attacks were in an increasing trend 182 human attacks and 4 bear death in Nilgiri range.
- More than 25 lakhs of rupees have been sanctioned towards in Sloth bear mauling compensation scheme. Human so as wildlife is being compromised
- Between the year 2008 to 2010 more than 100 quarries were running in an average in the Range this was the period when maximum human mauling cases (60%, n=111) were reported.
- 31 cases of livestock killing reveals that the feeding ecology of sloth bear is changing and is really a clue of increasing in human sloth bear conflict in the Range.

Conclusion

- Such a large number of stone and murrom quarries have the potential to destroy this natural delicate bear habitat.
- The stone quarries are closely situated to reserve forests which swell the intensity of human interference in bear territory
- This compel the bears to strayed out of the forests at night and invaded human settlements around the reserve forest in search of food which raised the mauling activities.
- Seeds, fruits, flowers, mushroom, tubers (MFP) of bear interest were also collected by the villagers commence a competition of food resources between sloth bear and human.
- In addition to these extensive cattle grazing leads to disappearance of palatable species and spreading of contaminated diseases

Continues...

- Illegal encroachment and clearing forest land are also the major reasons for conflict.
- Sloth bear use fringe forest areas for foraging, but the areas are highly used by the villagers as lavatory, agriculture etc, thus resulting into conflicts.

Mitigation strategy

- Restricting the legal or illegal mining in and around the Bear habitat of Swarnachuda reserve forest
- Bear habitat use should be identified and human interference in this habitat should be limited
- A detail study on its peculiar dietary habitat of this sloth bear population need to be studied
- Protection and restoration of the deforested land by aforestation of trees of bear interest around the reserve forest should be done
- Education and awareness programmes related to conservation, bear ecology and factors for menacing behaviour by bears need to be conducted for villagers in the affected areas.

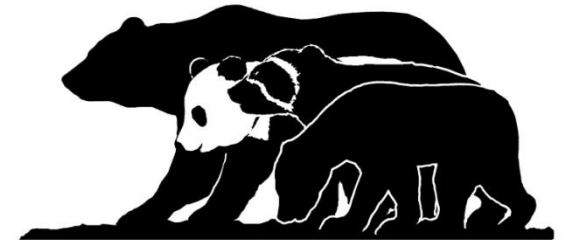
Acknowledgments



- THE RUFFORD FOUNDATION, London W1T 7QZ, UK ;
www.ruffordsmallgrants.org
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Conservator of Forests, Baripada Circle
- Shri Harsha Bradhan Udgata, Divisional forest officer
Balasore Wildlife Division.
- Range Officer and forest staff of Nilgiri Wildlife Range
- local villagers of the villages around swarnachud RF
- Surendra Mallik, and Goyadhara Behera the field assistants.



With motivation saved from retaliation killing



Bear Specialist Group

Thanking you

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