

Human-wildlife Conflict



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PRESENTATION OUTLINE

- Definitions of Human-Wildlife Conflict
- Overview of Human-wildlife conflict in Sarawak
 - Species
 - Long-tailed Macaque
 - Crocodile
- Conclusions and recommendations

Definitions of HWC

- Human–wildlife conflict is defined by the [*World Wide Fund for Nature*](#) (WWF) as "any interaction between humans and wildlife that results in negative impacts on human social, economic or cultural life, on the conservation of wildlife populations, or on the environment.
- A 2007 review by the [*United States Geological Survey*](#) defines human-wildlife conflict in two contexts; firstly, actions by wildlife conflict with human goals, i.e. life, livelihood and life-style, and, secondly, human activities threaten the safety and survival of wildlife. However, in both cases, outcomes are decided by human responses to the interactions.

Overview of Human-wildlife conflict in Sarawak

- In Sarawak, human-wildlife conflict mostly came from two species, Saltwater Crocodile (*Crocodylus porosus*) and Long-Tailed Macaque (*Macaca fascicularis*) and very minimal impact on others species.
- In Peninsula Malaysia, there are 5 main species that make human-wildlife conflict, namely;
 - Long-tailed Macaque,
 - Wild Boars,
 - Elephants,
 - Civets and
 - Pig-tailed Macaque (PERHILITAN).

Summary of Human-Wildlife conflict in Sarawak for 2013 (Source ; SWAT database)

		2013
	Species	Cases
1	Slow Loris	5
2	Sun Bear	3
3	Pig-tailed Macaque	1
4	Long-tailed Macaque	3
5	Bear Cat	1
6	Malay Civet	1
7	Wild boar	1
8	Soft shell Turtle	2
9	Asian Leaf Turtle	1
10	Malayan Box Turtle	1
11	Reticulate Python	1
12	Cobra	2
13	Crocodile	39
14	Black Hornbill	1
15	Eagle	2
16	Bees (Hornet)	1
		65

Summary of Human-Wildlife conflict in Sarawak for 2014 (Source ; SWAT database)

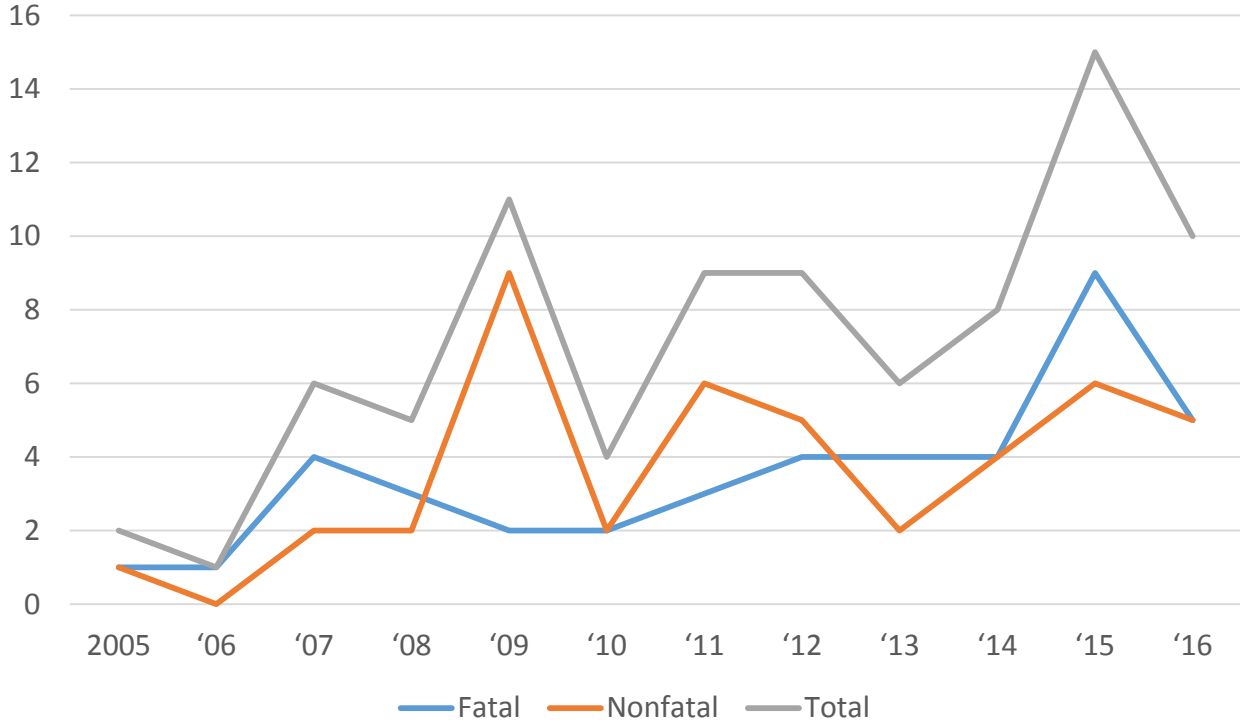
	Species	2014 Cases
1	Slow Loris	4
2	Sun Bear	0
3	Proboscis monkey	1
4	Silver Leaf	1
5	Pig-tailed Macaque	3
6	Long-tailed Macaque	27
7	Bear Cat	0
8	Malay Civet	0
9	Wild boar	0
10	Leopard cat	1
11	Bats	1
12	Soft shell Turtle	1
13	Asian Leaf Turtle	0
14	Malayan Box Turtle	0
15	Reticulate Python	6
16	Cobra	7
17	Crocodile	30
18	Beiga dendrophila (snake)	1
19	Pit Viper	1
20	Black Hornbill	2
21	Eagle	0
22	Brahminy Kite	1
23	Owl	1
24	Asian keol (birds)	1
25	Bees (Hornet)	1
		90

Summary of Human-Wildlife conflict in Sarawak for 2013 (Source ; SWAT database)

	Species	2015 Cases
1	Slow Loris	0
2	Sun Bear	4
3	Proboscis monkey	0
4	Silver Leaf	0
5	Pig-tailed Macaque	3
6	Long-tailed Macaque	24
7	Bear Cat	2
8	Malay Civet	0
9	Wild boar	0
10	Leopard cat	1
11	Bats	0
12	Soft shell Turtle	5
13	Asian Leaf Turtle	0
14	Malayan Box Turtle	2
15	Reticulate Python	5
16	Cobra	4
17	Crocodile	41
18	Beiga dendrophila (snake)	0
19	Pit Viper	0
20	Black Hornbill	0
21	Eagle	0
22	Brahminy Kite	0
23	Owl	2
24	Asian keol (birds)	0
25	Bees (Hornet)	0
26	Monitor Lizard	3
27	Gibbon	1
28	Flying fox	1
29	Malayan Brown Snake	1
30	Green Turtle	1
31	Pegion (domesticated)	1
32	Clauded Leopard	1
33	False Gharial	1
		103

Number of Crocodile captured/trap throughout the state for the year 2013-2015							
					TOTAL	DEAD	ALIVED
2013 (January - December)							
	Number of crocodile attack				12	6	6
	Number of operation conducted				16		
	Number of Crocodile captured				10	2	8
	Number of Crocodile surrendered by the Public				1	0	1
2014 (January - December)							
	Number of crocodile attack				8	4	4
	Number of operation conducted				13		
	Number of Crocodile captured				11	4	7
	Number of Crocodile surrendered by the Public				nil	0	0
2015 (January - December)							
	Number of crocodile attack				10	5	5
	Number of operation conducted				22		
	Number of Crocodile captured				20	6	14
	Number of Crocodile surrendered by the Public				2	0	2
2016 (January –November)							
	Number of crocodile attack				10	5	5
	Number of operation conducted				19		
	Number of crocodile capture				18	16	2

Crocodile Attacks in the Last Ten Years



Year	Fatal	Non-fatal	Total
2005	1	1	2
'06	1	-	1
'07	4	2	6
'08	3	2	5
'09	2	9	11
'10	2	2	4
'11	3	6	9
'12	4	5	9
'13	4	2	6
'14	4	4	8
'15	9	6	15
'16	5	5	10

Wildlife-Human conflict Mitigation measures

- In Sarawak, Sarawak government established SWAT (Swift Wildlife Action Team) to mitigate and to address human-wildlife conflict.
 - The main task is to manage and oversees any reported Human-Wildlife Conflicts throughout Sarawak.
 - be the first respondent for any cases involving human and wildlife especially those cases involving human fatality or injury by the wildlife.

Briefly about SWAT

SWAT means:-

- Swift – Immediate response time;
- Wildlife – All wildlife especially from Schedule 1, 2 and 3 of Wildlife Protection Ordinance 1998;
- Action – Intervention including rescuing by capturing, relocating or removing the elements of human-wildlife conflict which related to wildlife;
- Team – Consist of selected SFC's gazetted officers throughout Sarawak.

Management strategies

Conflict management strategies comprised of

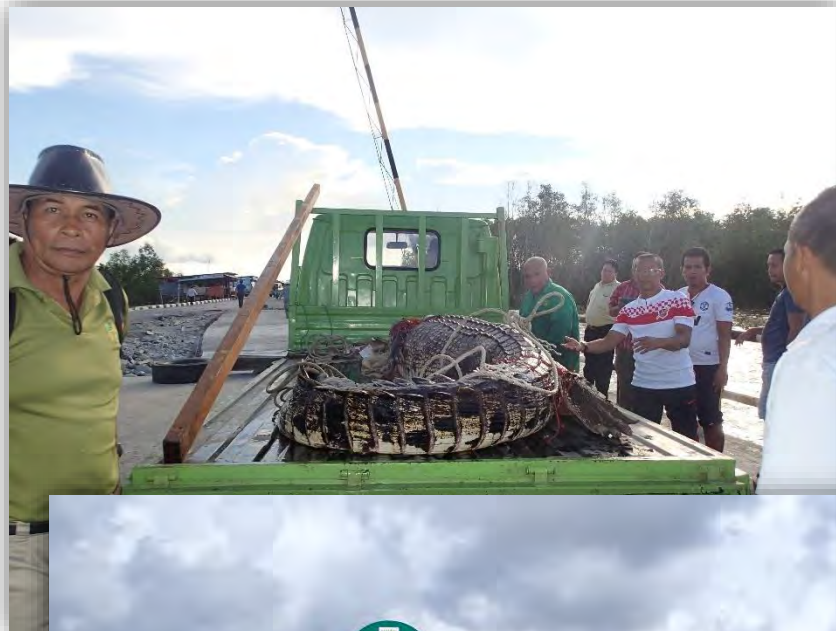
(A) Macaques

- lethal control,
- translocation, and
- regulation of population size (e.g. neuter Alfa male)

(B) Crocodile

- “***The Crocodile Management Plan for Sarawak***” – final stage.
- Implementation of CRZ (Crocodile removal zone)
- Culling to reduce the population (e.g. river system with high population of aggressive crocodile). Slide 9.
- Awareness to local community living within crocodile zone (3M Buaya)

Example of CROCODILE – Interventions



Macaque



Long-tailed Macaque surrendered by public and temporary keep at Matang WC



Long-tailed Macaque being rescued by SWAT staff, Sibul Regional Office.

Transfer of Saltwater Crocodile from CITES Appendix I to Appendix II

What does it mean?
Why do we do it?
Way forward?

What is CITES?

CITES is Convention on International Trade in Endangered Species of Fauna and Flora

Simplified:

- Appendix I – no trade of animals caught from the wild, captive breeding for certain species is allowed.
- Appendix II – trade of wild caught animal is allowed however subject to quotas. Non-Detrimental-Finding is required.
- Appendix III – a quick mechanism to get other countries to help enforce trade in some species.







Successful Transfer from CITES Appendix I to Appendix II at COP17, Johannesburg, South Africa (Sept-Oct 2016)

Saltwater crocodile (*Crocodylus porosus*) in Malaysia is now in Appendix II, with wild harvest restricted to the State of Sarawak and a zero quota for wild specimens for the other States of Malaysia (Sabah and Peninsular Malaysia), with no change in the zero quota unless approved by the Parties.

Aims: To delivery benefits to communities adversely affected by crocodile in their midst.

Harvest quotas (recommendation in CITES Proposal)

Approved harvest quotas for the first three years are as follow:

- a. Less than 2,500 eggs or 750 hatchlings or 375 yearlings, and
- b. A ceiling of 125 individuals of sub-adult or adult.

Safeguards aimed at reducing this if the population response does not meet expectations.

Recommendations and Way Forward

License and Compliance

1. All collection must be licensed in person or company (only listed collectors are allowed).
2. License fee of RM100 per annum and duplicate copies at RM5 per copy
3. Under and in accordance with the terms and conditions of a licence e.g.
 - Licence to be carried in person by the collector and produced by the collector.
 - Licence to be surrendered upon expiry with transaction records.

4. All collection, selling and buying of wild harvest are to be recorded in an official transaction record book purchased from the Controller.
5. Annual transaction to be returned to the Controller upon expiry/renewal of licence.
6. All crocodiles must be planted with Radio Frequency Identification (RFID) or Passive Integrated Transponder (PIT) tags.

Socio-economic Benefit to Affected Communities

1. Harvesting is only allowed with consent from affected communities, respecting their beliefs and taboos.
2. Communities may harvest or allowed third party to operate in the area.
3. Proposed community fee of :
 - a) RM5 per egg,
 - b) RM10 per head of hatchlings(<60 cm) and yearlings (60cm – 120cm),
 - c) RM100 for sub-adults (120cm – 180 cm) and adults (>180 cm).

Conservation Fund

- Proposed conservation fee of :
 - a) RM5 per egg,
 - b) RM10 per head of hatchlings(<60 cm) and yearlings (60cm – 120cm),
 - c) RM100 for sub-adults (120cm – 180 cm) and adults (>180 cm).

Way Forward

For Crocodile Base Business in Malaysia

1. The downlisting of saltwater crocodile to CITES Appendix II will come in force 6 months after Cop17 i.e. April 2017. Harvesting mechanism will be put in place according to the management plan.
2. Workshop and training programmes will be conducted to affected communities, crocodile farmers and potential entrepreneurs on the crocodile harvesting and trading.
3. Crocodile's eggs and youngs harvested from the wild may be ranches for skin, meat or life trade.
4. Sarawak needs to develop downstream industry. Tannery and leather industry need to be developed to allow value added to the product.
5. Sarawak also needs to engage professionals in the field to help develop this new economic opportunity and to get communities to be involved.
6. Malaysia needs to engage with importing countries e.g. China, Thailand, Japan, and European Union (EU) for possible market for both raw and finish products.

Conclusions and recommendations

- Management plan for Crocodile – incorporating sustainable use
- Continued research in order to get comprehensive database on each target species (e.g. Long-tailed Macaque and Crocodile)
- Enhance public awareness (e.g. 3M for crocodile) on animals behaviour and how to live coexistent with wildlife.



Thank you