A conceptual framework for Amur Leopard restoration in South Korea

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Tigers, Leopards, and Koreans



Tigers, Leopards, and Koreans



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Bring carnivores back?



- Carnivores are both culturally and ecologically important
- Contributing global tiger and leopard conservation effort

Carnivore reintroduction



- is highly complicated
- requires immense financial, human & technical resources
- requires long time
- Has had a low chance of success so far
- \rightarrow Needs careful approach



Guidelines for Reintroductions and Other Conservation Translocations

Version 1.0



REINTRODUCTION AND INVASIVE SPECIES SPECIALIST GROUPS' TASK FORCE ON MOVING PLANTS AND ANIMALS FOR CONSERVATION PURPOSES

Conservation Measures Partnership's Open standard for the practice of conservation



Project Scope





Vision & Conservation Targets

• Vision:

Restoration of viable Amur leopard population in South Korea for improved biodiversity and ecosystems and the benefit of future generation

Conservation Targets:

- Amur leopards
- Prey
- Habitat of leopards & prey







Viability Assessment : Amur leopards

Itom	Current	Unit	Measurement Range			
Item	status		Poor	Fair	Good	Very Good
EA1: population size						
I-1: number of total leopards	NA	number	<15	15 - 29	30 - 50	>50
I-2: number of breeding females	NA	number	<7	7 - 9	10 - 15	>15
EA2: reproductive success						
I: reproduction frequency	NA	years	every >4	every 3~4	every 2~3	every 2
EA3: survival						
I: survival rate	NA	%	<0.5	0.5-0.6	0.7 – 0.9	1

KEA : Key Ecological Attribute I : Indicator

Viability Assessment: Prey

Item	Current status	Unit	-	Measurement Range				
		UIII	Poor	Fair	Good	Very Good		
EA1: major prey density								
I-1: goral density	0.14	/km ²	< 0.11	0.11 - 0.15	0.16 - 0.20	>0.20		
I-2: roe deer density	NA	/km ²	<1.0	1.0 - 1.9	2.0 - 3.0	>3.0		
I-3: water deer density	5.9	/km ²	<1.0	1.0 - 2.9	3.0 - 5.0	>5.0		
I-4: wild boar density	4.5	/km ²	<1.0	1.0 - 1.9	2.0 - 3.0	>3.0		
EA2: prey biomass								
I: total prey biomass	>820,858	kg	<250,000	250,000 - 489,999	490,000 - 820,000	>820,000		
EA3: prey distribution								
I: prey occupancy	0.9-0.99	%	<0.80	0.80-0.89	0.9-0.99	1		
KEA : Key Ecological Attr	ibute							

I : Indicator

Overall status of prey : *Good*

Viability Assessment: Habitat

Item	Current status	Unit -	Measurement Range				
			Poor	Fair	Good	Very Good	
EA1: habitat fragmentation							
I: connectivity	little fragmented	landscape context	highly fragmented	moderately fragmented	little fragmented	not fragmented	
EA2: forest fire occurrence							
I: frequency of large forest fire (>30ha)	8	years	<10	10 - 14	15-20	<20	
KEA · Key Ecological Attribute	2						

KEA : Key Ecological Attribute

I : Indicator

Overall status of habitat : Fair





THANK YOU!