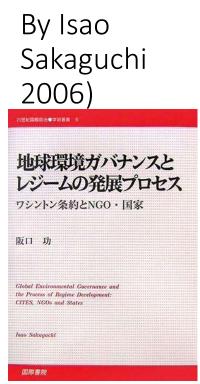
How to coexist with dangerous wild animals such as elephants and bears.

- 1. A resolution of CITES CoP7 (1989). Relationship between scientific knowledge and trade-ban
- 2. What happens in elephant habitats? Elephant protection and human-elephant conflict in Africa
- Basic concept of wildlife management and natural resource use, situation in developed and developing countries
- 4. The latest research on international trade in ivory. Effects of Chinese market closure
- 5. Conclusion, summary for policy makers

Hiroyuki Matsuda, Yokohama National University Ecological risk management • [When CITES faced on the conflict] the aesg recommended as a view that agreed to put a healthy population in Appendix II after imposing a moratorium on the ivory trade after CoP7 based on scientific knowledge and the CITES standards. However, the trade opponents, who had a numerical advantage in COP7, took a strategy to maximize their own interests and tried to stick to the publication of the annex of the entire population. As a result, COP7 widely ignored scientific knowledge, expert recommendations, and Interim translation by myself appendage standards, and all populations were published in Annex I. (P258)



AESG=African Elephant Specialist Group

Poaching on African Elephants

 The CITES has compiled a report on elephant poaching monitoring (MIKE: Report on Monitoring the Illegal Killing of Elephant).

◆ The main points in COP18 of the CITES are as follows.

- Poaching peaked in 2011 and was essentially flat in 2017 and 2018
- By region, there are high concerns about poaching in central Africa.
- As a whole, the trend of ivory price and the relation between poverty, political corruption and poaching are suggested.

Illegal trade of African Elephants

Under the CITES, illegal trade information is grasped based on the Elephant Trade Information System (ETIS). The main points raised at the CoP18 are as follows.

•<u>The number of illegal trades in the world is decreasing</u> from the peak of 2012 to 2013, and the closing of the market in China may be the cause.

 \cdot Malaysia, Mozambique, Nigeria and Vietnam being listed as the group of countries most involved in illegal ivory trade.

• Under the approval of the Convention, limited international trade of ivory (oneoff trade; conducted in 1999 and 2009. The importers was Japan in 1999 and Japan and China in 2009), but one-off trade did NOT contribute to the increase in poaching. 3. What happens in habitats of African elephants

On air on 2020/3/16 TV Tokyo

- Elephants killed 7 people last year alone in a single village next to a nature reserve in Tanzania.
- There is no compensation for the daughter whose father was killed.
- The government protects the elephants, and people are not allowed to kill them.
- Residents even hate elephants
- Even after being driven away, the elephant realizes that people do not follow the protected area and they can reenter.
- (Matsuda's comment) Stopping ivory trade and ban on poaching will not solve these human-elephant conflict.

How do residents think of elephants?

- It is a <u>pest animal</u> that destroys farmland and tramples people
- Developed nations value elephants more than local people (if the <u>Gov't have the budget to keep elephants alive</u>, UNICEF fundraising will allow dozens of children to go to school.)
- The use of ivory of culled elephant is not allowed (The "north wind" policy)
- People are first, but local people cannot live without the gift of nature. I want to coexist with wild animals (The "Sun" Policy)
- Keep elephants away from farmland where elephants can easily get food (killing is the most realistic measures = elephants are wise and does not respond to iterated intimidation)



Dozens of people per year have been killed by elephants throughout Tanzania for about 10 years. HEC = Human Elephant Conflict

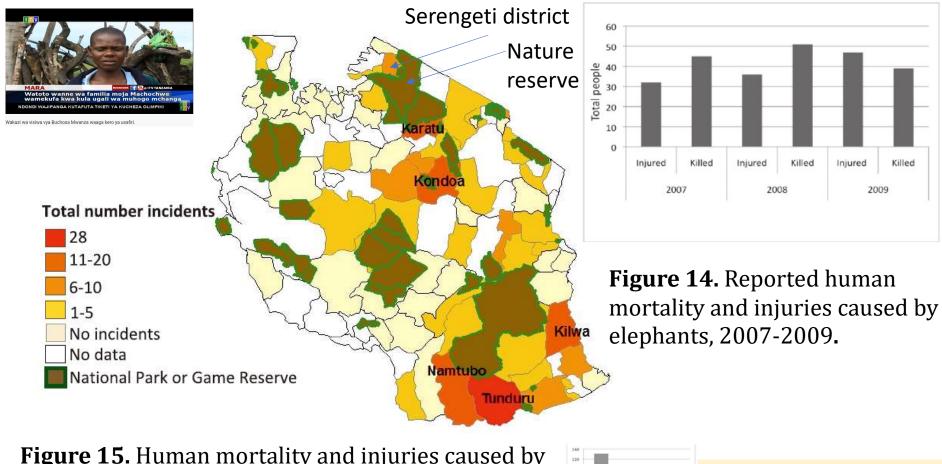


Figure 15. Human mortality and injuries caused by elephants, by district 2007-2009

Fig.16. Reported problem elephants shot, by year, 2007-2009

Tanzania Elephant Management Plan 2010

The Telegraph •Brian Jackman 26 July 2012

The trouble when a Maasai boy was killed by a buffalo and an officer from the KWS [Kennya Wildlife Service] blamed the killing on the Maasai [in 2012].

- ...the Maasai receive only a small proportion of the revenue from the park, which covers 300,000 acres of the two million-acre Amboseli ecosystem, and most of the animals regularly move in and out of the unprotected areas where the Maasai live. On most nights, three quarters of Amboseli's elephant population will be outside the park, destroying crops and creating conflict with the surrounding human population.
- As we were going to press, order had been restored after the KWS called in reinforcements and community leaders ordered an end to the killing spree.



https://www.telegraph.co.uk/travel/news/Elephants-killed-by-Maasai-in-row-with-wildlife-services/

4. How to treat wildlife in developing and developed countries

- Y. Iwai **[** Why do elephants attack our village? What does it mean to coexist with wild animals? **]** (2017 in Japanese)
 - "In Tanzania, only hunting ban was initially done, but then residents were forced to relocate,". "The Ikoma tribe, which originally did not hunt elephants, is also relocated." Serengeti was a "human land" before becoming a "wild kingdom".
 - Matsuda: If there were a village that was forced to relocate in Japan to build a dam, many of them would oppose the dam and citizens will sympathize with it. I hear that there is also emigration to create a nature reserve in China ["Ecological migrants"].

Japan's Ministry of the Environment Q&A on ivory

Q2 What is the reason for the decrease in areas where African elephants are decreasing?

- "poaching for ivory and meat has traditionally been said to be the main cause of African elephant decline, and illegal hunting remains a significant factor in some regions, especially in Central Africa.
- A bigger factor is the loss and fragmentation of the habitats due to rapid land development associated with population growth. Specific signs of this trend are reported to be an increase in human 世銀統計 (丫⊈±) 3 -elephant conflicts, which exacerbates the threat to elephant populations. *"

https://www.globalnote.jp/post-2805.html



* IUCN Redlist https://www.iucnredlist.org/species/12392/3339343#threates

https://www.natureasia.com/ja-jp/ncomms/pr-highlights/12964

The poaching rate of African elephants has declined since 2011 Severin Hauenstein, Colin Beale \hat{b}_{n} Nature Communications 2019

- Here we show that annual poaching rates in 53 sites (monitored by MIKE) strongly correlate with proxies of ivory demand in the main Chinese markets, whereas between-country and between-site variation is strongly associated with indicators of corruption and poverty.
- African elephant poaching since the early 2000s increased. Core populations both inside and outside protected areas decreased by 30% in seven years and the number of dead elephants found poached increased.
- Our analysis reveals a recent decline in annual poaching mortality rate from an estimated peak of over 10% in 2011 to <4% in 2017. Based on these findings, we suggest that continued investment in law enforcement could further reduce poaching, but is unlikely to succeed without action that simultaneously reduces ivory demand and tackles corruption and poverty.
- We suggest that improving law enforcement using conventional methods in many areas might reduce elephant poaching, but reductions in poverty and corruption in communities neighbouring protected areas may have a greater effect and obvious additional benefits.

https://www.nature.com/articles/s41467-019-09993-2.pdf

African elephant poaching rates correlate with local poverty, national corruption and global ivory price Severin Hauenstein¹², Mrigesh Kshatriya³, Julian Blanc^{3,4}, Carsten F. Dormann¹ & Colin M. Beale²

• The illegal trade in ivory, however, is complicated: certainly Chinese demand is important, but recently more large seizures of raw ivory were made in Thailand, with transit centres for shipping to other East Asian states such as Malaysia, the Philippines and Vietnam. Reducing demand has been seen as a crucial step in stemming poaching in Africa, yet the economics of illegal trade make this complicated: trade bans and associated ivory seizures may even increase poaching incentives by causing price rises in elephant ivory²³.

> 23 Biggs, D., Courchamp, F., Martin, R. & Possingham, H. P. Legal trade of Africa's rhino horns. Science 339, 1038 (2013).

Y. Iwai 『Why do elephants attack our village? What does it mean to coexist with wild animals? 』 (2017 in Japanese)

- Even if the country is supported, it does not lead to the support of the people who actually face the elephant ^{P121}. It will not be a solution.
- <u>The theory of nature conservation is developing.</u>
 <u>[whether this fashion will accelerate or stop by new</u>
 <u>Coronavirus...]</u>
- The fact that animals are no longer afraid of human beings by stopping hunting and increased animal damage ^{P55}
 - H.M.: Drivers that increase animal damage
 - = Hunting reduction + Population increase \times GDP development



Wildlife management would promote effective use of wild Interim translation by myself animals

- In Hokkaido, overpopulation of deer causes deep 设員名簿 conflict with people's lives, such as damage on 「業と財務報告 入会のご室内 natural vegetation, forests, meadows and agricultural farms, and frequent car and train accidents.
- hunting in Europe obtains venison and population control of deer, by shooting deer so as not to damage it as much as possible, bleeding completely, and peeling, deconstructing and commercializing at meat processing factory. In addition, in UK where hunting is paid for and used as a financial resource for forest conservation management, the "Deer Association" has been established as a comprehensive management organization, and practical activities are conducted with the understanding and cooperation of the people.
- We would like to follow European hunting system for a model for a new measure with wildlife, and we would like to realize in Hokkaido "the cohabitation of forests, deer and people", which is realized through effective combination of damage prevention, effective use of natural resources".

Japan Ezo deer Association http://yezodeer.org/association/mission.html 13

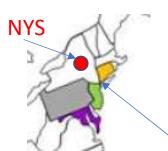
アクション エッセイ ほんだな 使い方 般社団法人工ゾシカ協会の使命



エゾシカ協会



Management status of deer in the northeastern United States (Source: Japan's Ministry of the Environment 2012)



NY city

- Deer population was heavily declined in the early 20th century due to overexploitation and deforestation. After that, the population increased remarkably from the 1970s due to protection measures and forest restoration, and from the latter half of the 1980s, problems such as damage to agriculture and forestry, impact on vegetation, and frequent traffic accidents became apparent.
- The proportion of hunters is 4.6% in the United States (0.1% in Japan)... Currently, there are sufficient hunters, so population control by hunting is the most economical situation.
- In addition to the hunting license, a hunter needs to purchase hunting permit. To prove legal capture, hunters fill in the necessary tags and collect the captured animal attached with tag, and report to the state.
- The state determines the catch limit and then the number of hunting permits issued (by hunting period, area and method) for each management unit every year.

https://www.env.go.jp/council/12nature/y124-04/mat01.pdf

NY State kills deer

 Culling–In many urban and suburban situations, hunting may not be able to lower deer populations enough to bring impacts down to a sustainable level (Williams et al., 2013). In these cases, the best option may be culling, which is the term for killing deer outside of a hunting framework. In New York, a DEC-issued DDP is necessary for a culling program to occur, and such permits typically allow the use of methods that are not available to hunters, which is why culling is usually more effective for rapid population reduction than hunting.

They kill deer and eat deer meat while NY mayor says not to use ivory taken from elephants that kill people in Africa.



DEER MANAGEMENT IN URBAN AND SUBURBAN NEW YORK

A Report to the New York State Senate and Assembly

December 31, 2018



Overabundant Deer, No Municipal Program

Town-, City- or Village-run Deer Management or Research Program

NY State

NY City

A logic of animal welfare & ethics

- Avoid lethal use of wild animals (most criticisms of ivory, tortoiseshell and whaling are from this perspective)
- eating livestock < > Vegetarians
 Recently Vegan diet
 + (Future) reject orange from farms under nuisance control???
- Would you prefer farmland crops where wildlife was cleaned?
- People determine the scope of protection (It's humanism) Monkeys S > dogs & cats S > deer & bears S > fish S > shrimp > Sea Urchin ...
 I respect for the diversity of personal values ← Do not force your value on others.
- Bears are caught alive. ← A huge number, unrealistic. NYS also control deer by game hunting and culling.

Shinichi Hayama "What is the Wild Beast Problem?" (University of Tokyo Press UP 2020.3)

- Large animals frequently appear in city areas throughout Japan
- personal injury in urban areas such as Maebashi City is also frequent.
- We can NOT say that these phenomena are simply because "wildlife have appeared to the town areas because there is no food in their original habitats in mountains due to development."
- "In the past, rural areas were like buffers for large animals to the city. But now... animals can easily enter the city. We can say that the problem of urban infestation is not a problem of wild animals but a problem of human society.

Ban on wildlife use does not solve anything...

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- "In 2018, Japan became the first CSF [swan fever] in 28 years and became infected with wild boars. Wild boars did not inhabit close to farms 28 yrs ago, control of the wild boar was not even ready [in 2018]. "Wildlife issues are lacking in policy makers' perception that humans and wildlife will last forever. We should switch fundamental recognition. (Shinichi Hayama 2020)
- H.M.: Recovery of wildlife will increase risks of human-wildlife conflict and zoonotic disease.



- The domestic cat is an alien predator in the "World's 100 Worst Invasive Alien Species"^{P35}. Predation of cats has become a major cause or cause of the extinction of 33 of the 238 extinct reptiles, birds and mammals in the world. *Toxoplasma*, a zoonotic disease transmitted by
 - cats, poses a significant risk to the fetus if a woman is first infected during pregnancy. Prevalence of women of childbearing age = 63% in Germany and 4% in South Korea.
- [Europe and USA] There is a serious conflict between a bird watchers and cat lovers because wild cats prey on wild birds. Nature protection differs from animal welfare. The lack of agreement on how to treat free-ranging cats is a big problem.
 [Natural Conservation Thought is still developing. [Our slogan is "Coexistence with environmental risks" instead of "antivirus war"]

The Devastating Consequences

of a Cuddly Killer

and Chris Santell

Basic concept of bear management

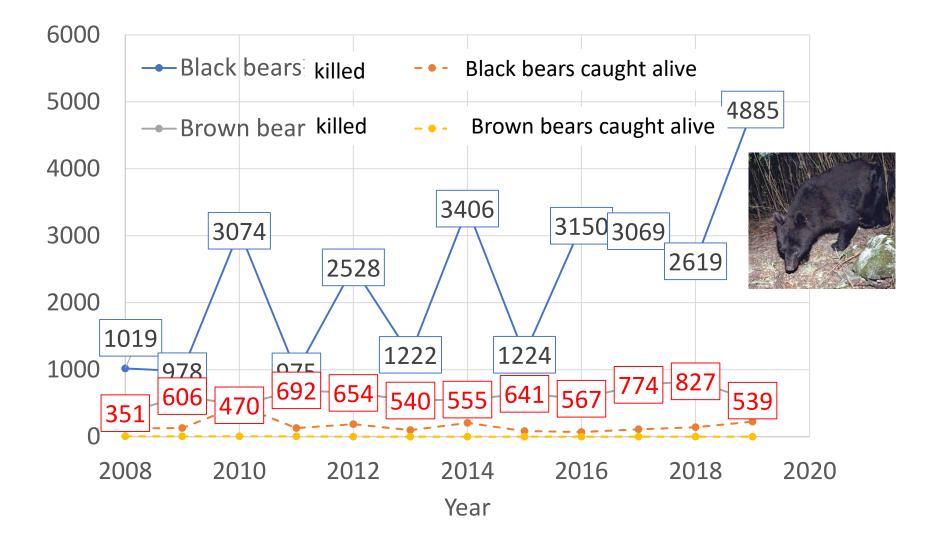
- "Good bears" avoid people, even if their home range includes highways and close to residential areas, which alone is not dangerous.
- Bears will not avoid people if they eat garbage left by people. "We have no choice but to remove fed bears." "A fed bear is a dead bear" (Yellowstone National Park slogan*).

People and bears are not friends, but can coexist by fearing each other (H.M.)



* http://www.yellowstone-bearman.com/B_housesafe.html

Thousands of bears are caught every year in Japan



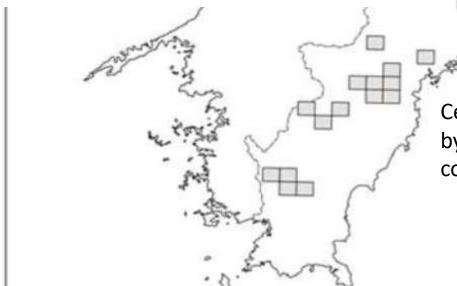
Map of brown bear appearance in Sapporo residential areas. Killing nuisance bears is strongly protested by citizens outside Hokkaido.



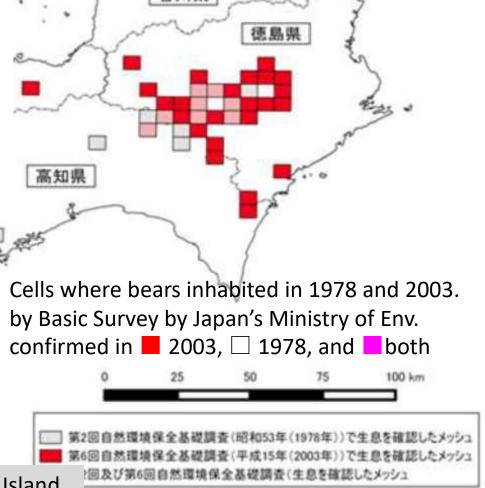
 Unlike deer, bear may kill people, and appearance of bears in the city area limits children going to school and stopping marathon events. Sapporo City wrote, "Before gathering information on brown bear from the websites and stay away from the their home range to avoid encountering brown bears", even where in residential urban areas.

Population size of bears in Shioku Island is <20 (press release on 2010/10/8)

Near extinct? It has been extinct in Kyushu Is., but is increasing in eastern Japan. Black bear is listed in CITES Appendix I, brown bear is in Appendix II. Half a century ago, bears in Hokkaido were rare.



Source: Guideline for black bears in Shikoku Island, by Japan's Ministry of the Environment in 2018



香川県

IUCN/SSC (2012) Guiding Principles on Trophy Hunting as a Tool for Creating Conservation Incentives.



Game hunting in Tanzania

 Trophy hunting takes place in both North America and Europe, and in developing countries where wildlife management infrastructure is often less fully developed. These hunts are usually conducted by persons willing and able to pay substantial amounts of money for the opportunity. They typically involve taking small numbers of individual animals and require limited development infrastructure. They are thus high in value but low in impact. In some cases, trophy hunting forms an important component of Community-Based Conservation/Community-Based Natural **Resource Management**, which aim to devolve responsibility for the sustainable use and management of wildlife resources from distant bureaucracies to more local levels.

CBD(2011) recommends sustainable use of wildlife for food...

• In the Congo Basin, for example, increasing population and trade from rural to urban areas compounded with the lack of any sizeable domestic meat sector are the main causes of unsustainable levels of hunting. If bushmeat consumption was to be replaced by local beef, as much as 80 per cent of the Democratic Republic of the Congo would have to be pastures. Therefore, there is no alternative to making the use of wildlife for food more sustainable.

We need to imagine lives of African residents.

- "The One Health philosophy has a big potential, but the problem is how to empower it and how to use it." Akio Yamada (2015) Japanese Veterinary History Magazine 52*
- Mitsuo Ichikawa, Professor Emeritus of Kyoto University, who researches folk in central Africa, points out. "If we don't think about how to use alternative protein sources for people living there, we cannot solve it." Asahi Shimbun ** October 29, 2012 Hirohiko Nakamura (article on CBD/COP11)

One Health = The idea that it is necessary to pay attention to animals and the environment in order to protect human health

* http://square.umin.ac.jp/jsvh/archives/pdf/52/052001007.pdf
** http://kon21.blog.fc2.com/blog-entry-968.html?sp

SADC [Tanzania] Statement at End of CITES COP 18 (2019/8/28)

- "Today CITES discards proven, working conservation models in favour of ideologically driven anti-use and anti-trade models. Such models are dictated by largely western non-State actors who have no experience with, responsibility for, or ownership over wildlife resources.
- "This anti-sustainable use and anti-trade ideology now dominates decisions made by many States who are party to CITES. <u>States are increasingly influenced by the</u> <u>dominance both at meetings of the decision-making</u> <u>structures of CITES and in their run up by protectionist</u> <u>NGOs whose ideological position has no basis in science</u> <u>or experience</u> and is not shared in any way by the Member States of SADC and their people.

Letter to Tokyo Mayer by past CITES secretary general 2019/May/13

 We would like to point out that if Japan closes its domestic ivory market, as suggested by Mayor de Blasio, this will do more harm than good to the cause of elephant conservation. To the contrary, we urge Japan to support moves to restart a carefully controlled global trade in registered ivory because this will truly aid elephant conservation.

Jaques BerneyCITES Executive Secretary (1974 to 1978)Eugene LapointeCITES Secretary-General (1982 to 1989)Willem WijnstekersCITES Secretary-General (1999 to 2018)

Controversial Issues of sustainable use

- Ivory is sustainable in Southern Africa.
 → Illegal exports from Japan still exist. ← These are not from Eastern Africa. We agree to ensure traceability and prevent illegal exports.
- There is no evidence that the Japanese market is increasing illegal poaching and trade. Poaching and smuggling have decreased since 2011. Market closure is counter-effective (former Secretary-General of CITES).
- Developing countries are also global economies. Cash income in developing countries is important.
- People are also members of ecosystems. Pest control is necessary for humans to live. The prey is gratefully utilized. There is no room for human beings to completely deny the killing of dangerous animals 29

My idea on Traceability document

• A private idea on future traceability document for elephant. "This seal is a product of an elephant that trampled and killed a person (or died naturally) in Tanzania in 1990. The government agency has confirmed this fact. (the elephant is also victims.) (Unicef? accepts letters and contributions to the bereaved of the victim of this elephant) ".



How to coexist with elephants and bears



- Elephants is increasing in southern Africa (common species, LC IUCN Redlist) and sustainable use is possible.
- In Southern Africa, elephant injury and crop damage are increasing (damage by bears is also serious in Japan).
- Ivory in Japan is NOT derived from poaching.
- Closing the market is counter effective (Letter from the past CITES secretary)
- We need to protect endangered wildlife.
- In globalized society, "human-animal conflict" and "pandemic zoonotic diseases" are becoming extremely serious, and humans are facing new challenges.
- Governance is needed for local people. Ban on hunting elephants is a bad effect on consensus in the local.

Draft summary for policy-makers

- Considering that sustainable use of ivory at least in southern Africa is a consensuses of CBD and IUCN,
- Reminding that we need both support for African people and conservation of elephants,
- Calling more strict regulations to avoid illegal trade.
- Seeking consistency between national and African wildlife management.
- Considering mutual awareness of Japanese and African culture through ivory
- Noting that wildlife management has become extremely important for poverty eradication and human-wildlife conflict in Africa, and for the risk of zoonotic diseases worldwide.