

臺灣黑熊保育行動綱領【英文版】

Conservation Action Plan for Taiwan Black Bears



委託單位：行政院農業委員會林務局 Forestry Bureau

執行單位：國立屏東科技大學 National Pingtung University of Science & Technology

研究主持人：黃美秀 Mei-Hsiu Hwang

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2012. 10 April.



2. 臺灣黑熊保育行動綱領英文版

Conservation Action Plan for Taiwan Black Bears
(2012.03.26)

1. Key schedule for Developing Conservation Action Plan for Taiwan Black Bears.

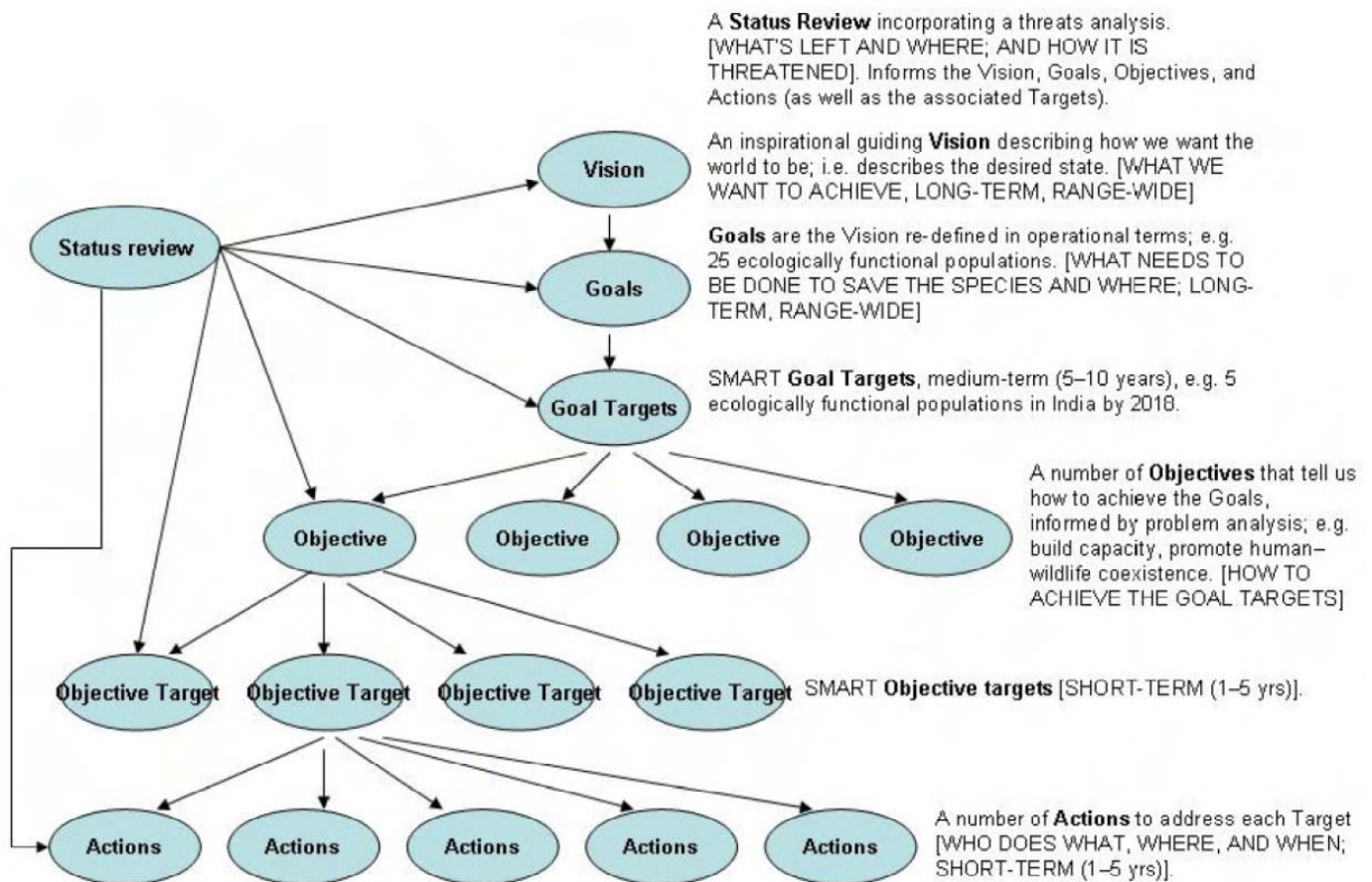
Date	Events
Feb/05	Conference on conservation of Taiwan black bears : retrospect and prospect
Feb/06	Conservation planning workshop for Taiwan black bears: Group discussion for vision, goal, goal target, objective, objective target, action. 5 groups with 17-13 persons in each group (not including 2 assistants) OUTPUT: Draft I of Conservation Action Plan-I
⏟	Revision of Draft I by Group facilitators
3/06	Meeting I of Group facilitators and key governmental stakeholders OUTPUT: Draft II of Conservation Action Plan-II
⏟	Revision of Draft II by Group facilitators
3/19	Meeting II of Group facilitators and key governmental and academic stakeholders Targeting on “capacity development” and ”policy and legislation” → OUTPUT: Draft III of Conservation Action Plan-I
⏟	Revision of Draft III by Group facilitators & Web Uploading for open review.
3/26	Conservation planning workshop for Taiwan black bears (II) Draft IV.

2. The core working group for Conservation Action Plan for Taiwan Black Bears

Name/ Title	Affiliation
裴家騏 博士 Dr. Kurits Pei	Institute of Wildlife Conservation, National Pingtung University of Science & Technology
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陳維立 博士 Dr. Jasmine W. Chen	Department of International Tourism Management, Tamkang University
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Dr. Mei-Hsiu Hwang	University of Science & Technology
蔡巧蓮 科長 Chiao-Lian Tsai, Division Chief	Construction and Planning Agency Ministry of the Interior, National Park Division
吳郁琪 主任 Yu-Chi Wu, Chief	TRAFFIC East Asia-Taipei
管立豪 組長 Li-Hao Guan, Division Chief	Forestry Bureau, Conservation Division
張弘毅 科長 Hung-Yi Chang, Section manager	Forestry Bureau ,Conservation Division, Habitat Management Section
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吳麗娟 技正 Liza Wu, Specialist	Forestry Bureau, Conservation Division, Wildlife section

3. The relationship between components of Species Conservation Strategies



Conservation Action Plan for Taiwan Black Bears

Final DRAFT 4, 2012/03/26 revised

I. Vision

Ensure the permanent existence of Taiwan black bears in the natural environment, with natural habitat and a viable population.

Descriptions:

1. Viable population: imply a sustainable and very large population that can exist in the long run. Population viability means demographic and genetic viability that is wide known, in addition to ecological viability that implies the interaction between the species and the environment.
2. To sustain ecological viability, the number of individuals must far exceed the minimal viable population (Soule et al. 2005, Tear et al 2005). It is recommended that the population size for reference be at least as large as the minimal viable population, or larger. Alternatively, criteria D (i.e., the number of mature individuals, 1,000), or criteria E where the probability of extinction risk in 100 years is less than 10% based on the population viability analysis, may apply, and the population status continues to be monitored by adopting robust methods (Linnell and Boitani 2008). Noticeably, 5% in 100 year criteria appears to be far more widespread than the IUCN value of 10%, based on a brief review of the PVA literature.

II. Goal

Minimize or eliminate the threats to Taiwan black bears and enhance the population viability to improve their conservation status.

Descriptions:

Conservation status of a species means the sum of the influences acting on the species concerned that may affect the long-term distribution and abundance of its populations across its distribution range. The “status” includes population viability, distribution and ecological functionality, as well as people’s values and perceptions. Population status is deemed appropriate when the dynamic data of the species in question indicates that, in the long run, the population is capable of sustaining itself in the natural habitat and the natural distribution range is neither diminishing nor will be diminishing in the foreseeable future. Moreover, there is, and will probably continue to be, a sufficiently large habitat, so as to maintain the population on a long term basis (Linnell and Boitani 2008).

III. Objectives

Item	Development Objectives
1	Theme: Human-bear interaction Objective: Significantly reduce illegal hunting and bear-people conflicts to build positive bear-people linkages
2	Theme: Trade and consumption Objective: Deter the illegal use and trade of bears and their parts, and effectively manage the legal parts
3	Theme: Habitat management Objective: Ensure effective management and restoration of habitat for Taiwan black bears based on their habitat requirements.
4	Theme: Research and information Objective: Enhance research capacity of Taiwan black bears across the full ranges and strengthen the collection, assimilation and application of relevant information.
5	Theme: Communication and education Objective: Significantly enhance awareness and knowledge of the general public and stakeholders about Taiwan black bears and their related conservation issues to appreciate their diversified values and take proactive conservation action.
6	Theme: Capacity development Objective: Strengthen the organizational, human capital, skills and resources required for Taiwan black bear conservation.
7	Theme: Policy and Legislation Objective: Review and amend, if deemed appropriate, policy and regulations concerning Taiwan black bear conservation.

References

- Linnell J., V. Salvatori and L. Boitani. 2008. Guidelines for population level management plans for large carnivores in Europe. A Large Carnivore Initiative for Europe report prepared for the European Commission (contract 070501/2005/424162/MAR/B2).
- Soulé, M., Estes, J. A., Miller, B. and Honnold, D. L. 2005. Strongly interacting species: conservation policy, management, and ethics. *BioScience* 55(2): 168-176.
- Tear, T. H., Kareiva, P., Angermeier, P. L., Comer, P., Czech, B., Kautz, R., Landon, L., Mehlman, D., Murphy, K., Ruckelshaus, M., Scott, J. M. and Wilhere, G. 2005. How much is enough? The recurrent problem of setting measurable objectives in conservation. *BioScience* 55(10): 835-849.

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Conservation Action Plan for Taiwan Black Bears

【 Final Draft. 2012/02/26 revised 】

1. Human-bear interaction

Objective: Significantly reduce illegal hunting and bear-people conflicts to build positive bear-people linkages.

Objective Target	Activity	Rank	Time frame (yrs)
A. Mitigate or eliminate negative human activities towards bears: illegal hunting.	1. Strengthen enforcement of regulations on illegal hunting and dismantling of traps and snares to minimize the opportunistic hunting of bears.	1	1-5
	2. Law enforcement agencies strengthen the investigation and seizing of animal clamps or traps.	2	1-3
B. Reduce negative impact of people-bear contact (for instance, human self-defense).	1. Analyze and clarify focus areas of human settlement and cultivated fields neighboring the distribution areas of black bears.	1	1
	2. Formulate response procedures, methods and regulations regarding bear encounter, including warnings, or registration, of entry into focus areas, individuals' response to bear encounter, support and responses of the management authorities, etc.	2	1
	3. Establish the monitoring and reporting mechanism of sighting of black bears, including spoor, and encourage reporting.	3	1
C. Reduce negative impact of bear threat to human life and property.	1. Establish compensation mechanism, including damage assessment method, verification of the legality of the damaged farmland, and hence compensate for crop damage in accordance with damage assessment result.	1	1-2

	2. Financial subsidy on prevention, including fence, and expelling by bait and noise, etc.	2	on-going
D. Establish the mechanisms and channels for local community to participate in bear conservation.	1. Enhance local community participation in bear conservation in aspects of planning, decision making and execution.	1	On-going
	2. Implement community-based bear conservation plan, such as no bear hunting community agreement, no outsider hunting, scrap old traps, improve on or discard snares/traps, and use shotguns, etc.	1	On-going
	3. Establish pre-warning mechanism and network for bear invasion, including organizing petrol team to deter and expel bears.	2	on-going
	4. Provide assistance to the farmland that has been damaged by bears in regards of image marketing to compensate for the losses.	4	on-going
	5. Exclude the areas with bear presence from permitted hunting ground.	5	2-3

2. Trade and consumption

Objective: Deter illegal use and trade of bears and bear parts and effectively manage legal parts.

Objective Target	Activity	Rank	Time frame (yrs)
A. Increase knowledge about bear conservation status of potential traders of live bears and their parts, for food, medical or craft use, to reduce demand for illegal live bears or products.	1. Facilitate and improve information exchange and dialogues among critical scholars and trade groups of Chinese medicine practisers, bear conservation academia, government and NGOs to update on latest information and enhance mutual understandings, and ultimately build on the appropriate recognition of sustainable use, legal use and effective management.	1	3
B. Enhance protection of Taiwan black bears through deterring threats of illegal and non-sustainable trade.	1. Build centralized electronic database that records the possessions and changes of live bears and bear parts as well as their investigation and seizing for the purpose of management, research and long term monitoring.	3	2
	2. Take an inventory of the bushmeat consumption amount in the markets, and strengthen management of existing registration certificates of bushmeat restaurants.	2	3
	3. Actively participate in regional or international organizations and conferences to collaborate on deterring illegal trade of bear parts and strengthen regional conservation goals.	5	2
	4. Enhance efficiency and capacity of the personnel in charge of investigation and seizing by, among other things, putting up incentive bonus schemes, to put an end to trade and circulation channels of illegal trade in medicine, crafts and bushmeat, etc.	1	3

	5. Establish standardized testing procedures and techniques to effectively and timely determine relevant bear parts and legality of their sources.	4	2-4
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3. Habitat management

Objective: Ensure effective management and restoration of habitat for Taiwan black bears based on their habitat requirements.

Objective Target	Activity	Rank	Time frame (yrs)
A. Strengthen management of the habitats that lie outside protected areas.	1. Formulate and execute bear habitat conservation or restoration in national forestry management plans; such plan should also encompass the national forests with bear presence but nevertheless excluded from protected areas.	1	1
	2. For non-national forests, feasible management strategy should be developed to suit the need of community conservation.	2	on-going
B. Ensure the safety of wild black bear populations	1. Monitor on a long term basis the existing critical black bear populations to implement adaptive management strategy, including breeding and change of population size.	1	on-going
	2. Implement appropriate protection or control measures in critical habitats or seasons in accordance with the movement pattern of black bears.	2	1

4. Research and information

Objective: Enhance conservation research capacity of Taiwan black bears; strengthen collection, exchange and application of related information

Objective Target	Activity	Rank	Time frame (yrs)
A. Establish information platforms about Taiwan black bear to facilitate information exchange and apply to research, education, outreach and management.	1. Continue to update on current websites about Taiwan black bears, expand contents, such as ecological, biological, behavioral and genetic information, and strengthen interconnections.	1	1
	2. Periodically organize workshops for stakeholders to exchange and update themselves on latest information.	2	on-going
B. Enhance knowledge about individuals and populations of Taiwan black bears.	1. Formulate a research master plan, determine priorities, and identify resource requirements in accordance with the knowledge gaps about individuals and populations of Taiwan black bears, including population size, distribution, population migration trend, population parameters, such as birth, mortality, immigration and emigration, constraint factors for population growth, population genetic structure, habitat status, viable population size, etc.	1	1
	2. Formulate a scientific straightforward system for population monitoring to track the fluctuation and trend of population size and distribution.	2	2-3
	3. Use satellite tracking techniques to gain insight into the impact of human activity on black bears and their habitat, especially at mid-elevations with human settlement.	3	3-5
	4. Develop non-invasive research approaches, such as scats and hair sampling, to study environmental hormone and genetic degradation of Taiwan black bears; study areas should include those with or without human-interference.	4	3
	5. Gain deeper insight into the genetic diversity of Taiwan black bears to avoid genetic pollution in the wild population during the course of artificial reconstruction.	5	3-5

C. Minimize threats to black bear survival.	1. Gain the knowledge about bear catches in numbers and locations, including trading figures.	1	1
	2. Identify critical black bear habitats, including high-quality habitats, habitats with bear presence but are nevertheless not covered by protected areas, and habitats deemed appropriate for bears but nevertheless lack bear traces or relevant information, to provide protection, interconnection and restoration.	2	3
	3. Establish reporting systems of human-bear conflict on time, location and severity in order to formulate response strategy and action. Conflict may include: (1) farming areas - legal or illegal; (2) garbage management – food carried or stored by mountain climbers, their leftovers, and garbage of the mountain dwelling clusters; (3) mountain climbing education – self protection and defense when conducting mountain activity, knowledge and skills to help protect the environment and wildlife; (4) transportation – car accidents involving bears.	3	2
	4. Identify other threats, their severity and response measures, including: (1) disease; (2) climate change; (3) Invasive alien species; (4) natural disaster; (5) small population size.	4	5
	5. Clarify the status of bear and its parts as far as demand in diet and medicine are concerned to understand its sources, species involved, production and sale chains, as well as the structure of interests involved, so as to provide the basis of policy formulation, regulation and implementation, self management, and education & advocacy.	5	3-5
D. Provide appropriate care to captive bear populations	1. Joint formulation of captive bear management policy by the related organizations; policy may include population lineages, conservation education, behavior study, and medical management.	1	on-going

	2. Hold periodic meetings among the organizations with captive bears to exchange information and techniques in addition to strengthening the links between studies of the bears in captivity and in the wild.	2	on-going
E. Identify knowledge gap in black bear management and advocacy.	1. Understand the recognition, attitudes and consumption intention of various stakeholders to provide bases for effective education and advocacy. Stakeholders may include hunters, mountain climbers, keepers, and consumers (diet and medicine).	3	2
	2. Build and strengthen the reporting systems of sighting black bears by, for instance, providing trajectory plotter or digital camera, to enhance information compilation of human-bear conflict and credible bear distribution.	1	on-going
	3. Strengthen collection of traditional knowledge about black bears, including bear active seasons, areas and paths; stories about human and bears, taboos, and hunting regulations.	2	3
	4. Understand the international trade of bear and its parts to facilitate the seizing by the customs authority.	4	3

5. Communication and Education

Objective: significantly enhance the recognition of the public and stakeholders about Taiwan black bears and related conservation issues to realize their plural values and take proactive conservation actions.

Objective Target	Action	Rank	Time frame (yrs)
A. Strengthen public understandings about Taiwan black bears.	1. Increase exposure of Taiwan black bear conservation: develop advocacy system, circulate advocacy materials and strengthen communications with the public.	2	2
	2. Develop an advocacy program based on the theme of Taiwan black bear products & the threat of hunting to convey to the public the message of the threat to the wild bear population imposed by bear products.	1	1
	3. Train and organize conservation promotion teaching groups to take on overall advocacy tasks and construct a conservation education network.	3	2
	4. Periodically organize national conservation outreach activities, or develop “Happiness Index of Taiwan Black Bears” to continue drawing the public attention.	5	on-going
	5. Bridge school education and deepen conservation education and promotion of the endangered species.	4	1-5
	6. Develop and encourage corporate participation in the conservation.	6	3-5
B. Improve people-bear relations in the potential habitat communities of Taiwan black bears.	1. Prioritize areas of conservation communication programs, formulate and execute.	2	2-3
	2. Identify critical community clusters of conservation, increase local participation and hierarchy of conservation plan, and conduct feasibility analysis of community education.	1	3
	3. Give priority to the development of education promotion programs of human-bear interaction, encounter with bear and reducing use of Taiwan black bear products, and wildlife conservation regulations in order to minimize the threat of illegal hunting to the wild population through communication of values.	6	1
	4. Conduct promotion tours in the remote communities and schools of potential black bear habitats.	3	1-5

	5. Collaborate with communities and other resources from the forestry bureau to collect socio-cultural information and develop tailor-made promotion programs to increase cultural transmission and mitigate hunting pressure.	4	2
	6. Establish networks of black bear stakeholders, maintain regular and interactive exchange channels, and provide incentives for participation.	5	on-going
C. Promote accurate media coverage of Taiwan black bear and encourage positive attention.	1. Take initiatives to provide timely information regarding conservation projects or issues of Taiwan black bears.	1	3
	2. Organize seminars on complex issues related to bear news in a timely manner.	3	5
	3. Convey messages related to Taiwan black bear by establishing and maneuvering various types of communications and assimilations.	2	1-3
	4. Strengthen coordination and cooperation with the media to broaden conservation promotion and advocacy.	4	1-3
D. Improve relations between recreation visitors and Taiwan black bears.	1. Strengthen utilization of bear sighting systems by providing incentives to recreation visitors for reference of monitoring people-bear relations and bear traces.	3	2-3
	2. Strengthen promotion of behaviors that are friendly to mountains and forests, such as LNT and influence of companion animals on wildlife populations, to reduce the impact on the wild.	2	2-4
	3. Target tourists to strengthen promotions of Encounter with Bears to avoid people-bear conflicts.	1	1
E. Minimize the potential demand for Taiwan black bear products.	1. Strengthen information exchanges with Chinese medicine scholars and trade associations.	1	2
	2. Develop quality and effective media programs - provide with Chinese medicine research mechanisms, strengthen promotion of the efficacy of alternative products, and emphasize the impact of consumption on the wild populations.	2	2

6. Capacity development

Objective: strengthen resources of organization, personnel, knowledge and skill related to Taiwan black bear conservation resources.

Objective Target	Activity	Rank	Time frame (yrs)
A. Enhance resources required for promoting Taiwan black bear conservation in policy making and execution at the government level.	[Organizational development] 1. Formulate and prioritise a master plan of research and conservation.	1	1
	2. Activate and source funds to support conservation of Taiwan black bear, including damage compensation mechanism.	2	1
	3. Implement regional management of black bear conservation action, or management plan of national forest management units.	2	3-5
B. Strengthen and fulfill all resources of human capital development required for Taiwan black bear conservation.	[human resources development] 1. Strengthen exchange and collaboration with domestic and international conservation organizations or experts to enhance professional capability in Taiwan black bear research and management through personnel cultivation and training.	3	3-5
	2. Enhance efficiency and capability of law enforcing officers in aspects of illegal hunting, dismantling traps and snares at local governments and seizing bear & its parts at customs.	2	3-5
	3. Strengthen community training, namely, enhancing capability of monitoring and conserving black bear population for communities within or neighboring bear habitats, and their capability of reporting and dialogue.	1	on-going
	4. Strengthen capability of identifying bear spoor of those active in mountain areas (e.g., mountain hikers, rangers, researchers, etc.) and agency personnel (e.g., national parks, forestry bureau and wildlife rescue centers) for enhancing professional skills.	4	1-3
	5. List personnel and organizations that can provide bear conservation training, e.g., universities related to biology, zoology, conservation and environmental education, institutions and private organizations, and develop and provide them with training	5	1

	channels and opportunities.		
C. Cultivate professional knowledge and skills of those practicing conservation education.	[human resources development] 1. Strengthen knowledge management system, and provide multiple training and learning channels, to enhance capabilities related to Taiwan black bear education and advocacy.	1	1-3
	2. Build partnerships among organizations of natural resources management, captive bear management, and research institutions to provide opportunities for educators to further deepen the knowledge and skills of educators, as well as to inject their enthusiasm.	2	1-3

7. Policy and Legislation

Objective: Review and amend where necessary policy and regulations related to Taiwan black bear conservation.

Objective Target	Activity	Rank	Time frame (yrs)
A. Assess and amend where necessary regulations and policy related to conservation of Taiwan black bears through examining the efficacy and relevance of current policy and regulation.	1. Periodical assess regulations related to wildlife conservation (it is recommended to be accomplished in 5 years), and review their efficacy of conserving Taiwan black bear, to enhance the protection for bears and achieve the conservation goal of biological diversity.	1	on-going
	2. Clarify the relations of cooperation and competition among the agencies governing conservation regulations at various layers of the government bureaucracies, or their contradictions, and make recommendations about amending laws, if deemed necessary. Assess the potential conflicts and obstacles to black bear conservation that may arise from the regulations that are being formulated, such as the regulation governing the indigenous hunting cultures drafted by the Council of Indigenous Peoples.	4	1
	3. Review the management and law enforcement by the competent authorities and the industry competent authorities related to wildlife conservation within their jurisdictions and confirm the cooperation and competition of their respective	2	1

	authorities or clarify issues of law enforcement. For instance, the consistence of black bear conservation and habitat management policies between national parks and the forestry bureau.		
	4. Review and assess the regulations, rules and system procedures related to the possession, use, trade and export & import of bear products to forestall the trade impact on Taiwan black bears.	3	1
	5. Lobby for the overhaul of conservation regulations to strengthen law enforcement and enhance the conservation level of Taiwan black bear and forest ecosystem.	5	3-5
B. Formulate correlation indicators between public policy and Taiwan black bear conservation.	1. In accordance with the “Central Mountain Range Corridor” conservation policy promulgate the benchmarked public policy of Taiwan black bear conservation to achieve the goals of forest ecosystem management.	1	on-going
	3. For Taiwan black bears, integrate into performance indicators of management the executing agencies of nature conservation, such as national parks of high-latitude mountains and other reserve areas, and perform evaluation on an annual basis.	2	1-5
	4. Assess the feasibility of including the conservation status of Taiwan black bear, e.g., viability, population size or trend, or habitat area, in the national conservation indicators for long-term monitoring programs.	3	1



11 April 2012

敬啟者：

台灣這一份亞洲黑熊保育行動綱領堪稱亞洲地區首度專為熊科動物所擬之詳盡保育綱領。這份綱領體現了長達十五年的研究數據總結，包括黑熊捕捉繫放、無線電追蹤、痕跡調查、訪查，以及一系列複雜的分析程序，檢視曾使用的和潛在的黑熊分布範圍、黑熊豐富度的空間差異，以及族群豐富度之變化。從這些資料可以很清楚地看出台灣北半部的黑熊族群比較脆弱，而且很明顯是源於狩獵活動，使黑熊數量減少違反了永續原則。這份行動綱領點出了此一重要議題，希望促使各方採取保育行動，以降低大多肇因於獵捕有蹄類動物過程的逢機狩獵或誤中陷阱之損失。

這份行動綱領是由管理人員和研究人員所組成的專業核心團隊，在經過漫長周詳的研討過程後所完成，包括與所有關鍵的權益攸關者進行數次討論會議，因而能涵蓋廣泛的想法與觀點。這份行動綱領擬定的方法與程序嚴格遵行世界自然保育聯盟（IUCN）物種保育策略計畫指南（2008. Strategic Planning for Species Conservation: A Handbook. Version 1.0. Gland, Switzerland: IUCN Species Survival Commission），綱領中所強調的關鍵議題和建議的緩解措施，均於這些討論流程中產生。這是按照 IUCN 這些新指導方針所最早制訂的（不管是哪種物種）保育行動綱領之一，也證明制定此一綱領的核心委員會公平地呈現了不同意見。就像 IUCN 指南所述：「讓分佈區內的權益攸關者參與這樣的過程非常重要，因為他們很清楚保育活動所要進行的周遭環境與整體狀況，而且他們的參與必要的，才會全心地投入並深具責任感」。全心投入與責任是這份保育計劃能否成功執行的重要特質。

這份保育行動綱領代表特有種台灣黑熊之保育的大躍進。接下來的重要步驟就是落實關鍵的保育行動；這會是漫長而艱難的過程。但很明顯地，這項保育的成功對於台灣人民而言意義非凡，而且在保育綱領推出的一開始就有來自政府最高層的支持。

世界自然保育聯盟/物種生續委員會（IUCN/SSC）的熊專家群組深感有此榮幸，對這份行動綱領充分地予以背書，並承諾將盡可能提供協助以促成計畫之落實。我們視此計畫為一優秀之典範，並希望能為其他亞洲有熊分佈地區所仿效。

我們預祝台灣在黑熊的保育獲致無上之成就。

最真誠的，

A handwritten signature in blue ink that reads 'David Garshelis'.

大衛·賈瑟利斯 博士（David Garshelis, PhD）

熊類專家群組共同主席（Co-chair Bear Specialist Group）

To Whom It May Concern:

The Conservation Action Plan for Asiatic Black Bears in Taiwan represents the first such detailed plan for bears anywhere in Asia. It embodies the culmination of 15 years of data, including bear captures, radiotelemetry, sign surveys, interviews, and a complex array of analytical procedures to examine used and potential bear range, spatial differences in bear abundance, and changes in abundance. The data clearly show a more fragile population in the northern half of the island, and it is apparent that this is due to unsustainable removal through hunting. The Action Plan addresses this important topic and promotes actions to reduce this offtake, much of which occurs as a by-product of opportunistic hunting or snaring of ungulates.

This Action Plan is the result of a lengthy, thoughtful process by a dedicated core team of managers and researchers. The process included meetings with all the key stakeholders. It thus encompasses a wide range of ideas and perspectives. The key issues and recommended mitigating actions highlighted in this plan have been derived through this methodical process, which closely followed the new recommendations of the IUCN (2008. *Strategic Planning for Species Conservation: A Handbook. Version 1.0.* Gland, Switzerland: IUCN Species Survival Commission). This is one of the first such Action Plans (for any species) that have followed these new guidelines, and is a testament to the work of the core committee that formulated this plan in ensuring a fair representation of ideas. As stated in the IUCN handbook: *“it is vitally important for range State stakeholders to be involved in this process because of their understanding of the context in which the conservation activities will be conducted, and because their participation is a prerequisite for the necessary ownership and sense of responsibility.”* Ownership and responsibility are important attributes for successful execution of this plan.

This Action Plan represents a giant leap forward in the conservation of the endemic Formosan black bear. The next important step will be implementation of the key conservation actions. That will be a lengthy and difficult process, but it is clear that there is tremendous national public interest in seeing that this succeeds, and early indications of government support at the highest levels.

The IUCN/SSC Bear Specialist Group is proud to fully endorse this plan, and pledges to aid in its implementation in any way possible. We view this plan as an exemplary model that we hope will be followed in other bear range states across Asia.

We wish the utmost success in conserving the bears of Taiwan.

Most sincerely,

A handwritten signature in blue ink that reads 'David Garshelis'.

David Garshelis, PhD

Co-chair Bear Specialist Group

1. 總統府發布之新聞稿

副總統接見「世界自然保育聯盟」(IUCN) 熊類專家群組主席大衛·賈瑟利斯(Dr. Dave Garshelis) 及「世界自然基金會」(WWF)保育部主任羅布·斯坦梅茨(Dr.Robert Steinmetz) 等一行

蕭萬長副總統下午接見「世界自然保育聯盟」(International Union for Conservation of Nature,IUCN) 熊類專家群組主席大衛·賈瑟利斯(Dr. Dave Garshelis) 及「世界自然基金會」(World Wide Fund for Nature,WWF)保育部主任羅布·斯坦梅茨(Dr.Robert Steinmetz) 等一行，期盼兩位國際專家從全球或區域性保育的高度分享其寶貴經驗，讓臺灣善盡全球保育的責任。

副總統致詞時表示，賈瑟利斯主席與斯坦梅茨主任二位都是世界著名的熊類研究專家，亦在全球性的保育組織擔任重要職務；此外，有「臺灣黑熊媽媽」稱號的「臺灣黑熊保育協會」黃美秀理事長，長期研究臺灣黑熊並積極投入保育工作，三位訪賓的努力與付出，令人敬佩，應予肯定。

副總統說，臺灣有山有水、是個生態非常豐富的地區，政府與民間長久以來均極為重視保育工作，並設有國家公園、野生動物保護區及自然保護區等，除維護完整的自然環境，也保護包括臺灣黑熊的各種野外動物族群。

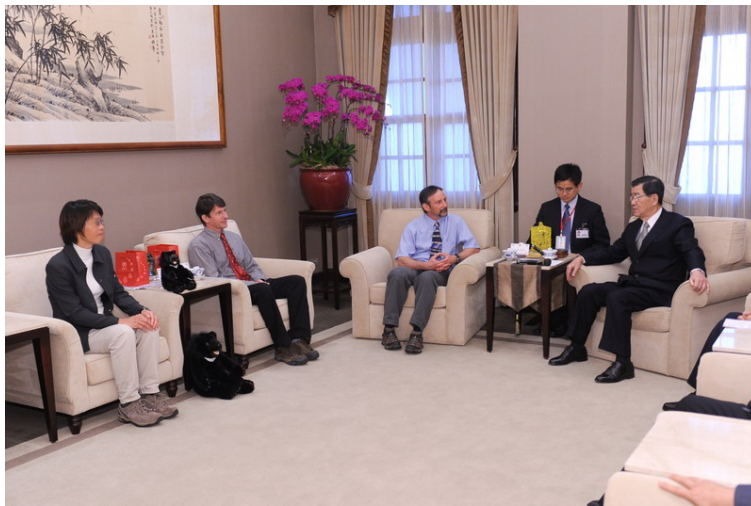
副總統提及，行政院農委會林務局臺東林管處在轄內自然保留區，進行野生動物的長期監測工作，在2011年10月曾拍到臺灣黑熊的照片，顯見黑熊的保育工作已具成效。

訪賓還包括「國立屏東科技大學」校長古源光、「紙風車劇團」團長任建誠等人，由行政院農業委員會副主任委員王政騰陪同前來總統府拜會副總統。

2. 2012年3月27日於總統府晉見蕭萬長副總統照片



2012/3/27 蕭萬長副總統與眾人合照(照片來源：總統府)



2012/3/27 蕭萬長副總統與學者們會談(照片來源：總統府)



2012/3/27 蕭萬長副總統致贈紀念品給 Dr. Garshelis
(照片來源：總統府)