# 中国东北虎栖息地保护行动计划 Amur Tiger Habitat Conservation Action in China













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## 一、背景介绍 Background

东北虎(Panthera tigris altaica)是世界现存的5个虎亚种之一,仅分布于中国东北东部、俄罗斯远东和朝鲜北部山地林区。中国历史上曾经是东北虎分布的中心区,在近百年来的森林开发、人口增长、土地开垦、道路延伸等因素影响下,使东北虎分布区逐渐缩小、隔离形成岛屿状,种群数量急剧下降,甚至接近于濒临绝迹的边缘。

Amur Tiger is one of the 5 sub-species of tiger in the world which distributes in the forest of the eastern part of northeast China, Russia Far East and the northern part of North Korea. Amur Tiger is extremely endangered in China, where it was historically widely distributed. The main reason for this big change is as follows: in the past century, with the population growth, forest exploitation, land reclamation, etc., the distribution area of Amur Tiger was isolated and fragmented, which led to the decrease of the population of Amur Tiger on the verge of extinction.











# 东北虎分布现状 Distribution of Amur Tiger

中国分布的东北虎数量在20只左右,其中黑龙江10~14只,吉林8~10只。分布于中国东北东部山地的野生东北虎有6个相互隔离的分布区。吉林省: (1) 大龙岭的珲春、汪清分布区; (2) 哈尔巴岭敦化分布区; (3) 张广才岭黄泥河分布区。黑龙江省: (1) 完达山的饶河、虎林、东方红、迎春分布区; (2) 老爷岭南部东宁、绥阳、穆棱分布区; (3) 老爷岭北部鸡东、穆棱分布区。

The recent research shows the total population of Amur Tiger in China are about 20 individuals, among which 10~14 are in Heilongjiang Provice, and other 8~10 are in Jilin Province. The existing 6 isolated distribution areas of Amur Tiger in the eastern mountain of Northeast China: Jilin Province: (1) Hunchun-Wangqing in Dalongling Mountain; (2)Harbaling Mountain in Dunhua City; (3) Zhangguangcailing Mountain in Huangnihe Region; and Heilongjiang Province: (4) Raohe, Hulin, Dongfanghong, Wandashan Mountain; (5) Dongning, Suiyang, Muling in the southern part of Laoyeling Mountain; (6) Jidong, Muling in the northern part of Laoyeling Mountain.











#### 自然保护区建设情况 Nature Reserves Construction

在东北虎分布区范围内已经建立的自然保区有吉林珲春东北虎自然保护区、长白山自然保护区、黑龙江东宁鸟青山自然保护区、鸡东凤凰山自然保护区等16个国家级和省级自然保护区,总面积 9886.84 km<sup>2</sup>。

9886.84km² is under protection by nature reserves at state or provincial levels, such as Hunchun Tiger Nature Reserve, Changbai Mountain Natural Reserve in Jilin Province; Niaoqingshan Natural Reserve, Phoenix Mountain Natural Reserve in Heilongjiang Province.











## 相关项目开展情况 Relevant Projects Ongoing

目前正在进行的东北虎保护的相关项目包括国家林业局保护司项目"黑龙江省东北虎及猎物种群野外调查与监测"、"完达山地区东北虎生境评价与保护对策研究"和"东北虎生态廊道调查及保护恢复方案"等项目。国家自然科学基金项目"基于粪便分子生物学和3S技术的马鹿(东北虎猎物)家域研究"。

There are several ongoing projects on Amur Tiger protection such as the projects "Survey and Monitor on Wild Population of Amur Tiger and its Prey in Heilongjiang Province", "Study on Habitat Assessment and Protection Strategy of Amur Tiger in Wanda Mountain", "Survey and Resumption Schematic Study on Ecological Corridor of Amur Tiger" from the Department of Wild Life Conservation and Natural Reserve Management of SFA, and the National Nature Science Foundation project "Study on Home Range of Cervus elaphus Based on Feces Molecular Biology and 3S Technology".











## 相关项目开展情况 Relevant Projects Ongoing

黑龙江和吉林省林业厅,黑龙江省森工总局所属林业局、自然保护区,与国际非政府保护组织(WWF、WCS)合作开展了"东北虎自然保护区野外巡护"、"珲春自然保护区野生东北虎的被动监测"、"东北虎保护志愿者清套活动"、"东北虎猎物资源调查"、"东北虎等野生动物伤害补偿"、"黄牛舍饲圈养示范与推广"、"中国长白山生态系统潜在东北虎栖息地判别技术"、"中国东北虎保护行动计划建议"、"东北虎边境栖息地调查"及东北虎保护宣传教育等项目活动。

There are several relevant cooperative projects between WWF, WCS and local forestry authorities of the project site, such as "Patrol in Amur Tiger Nature Reserve", "Passive Monitor on Amur Tiger in Hunchun Nature Reserve", "Trap Cleaning Action by Amur Tiger Protection Volunteers', "Prey Resource Survey of Amur Tiger", "Compensation for damage, loss, or injury by Amur Tiger and Other Animals", "Demonstration and Popularization of Cattle Breeding in House or Fence", "Potential Tiger Habitat Judgement Technology in Changbai Mountain", "Suggestion for Plan of Amur Tiger Protection in China", "Habitat Survey of Amur Tiger Along the Frontier".











### 亟待解决的主要问题 Problems to be Solved

- (1) 东北虎栖息地破碎化程度较高,可捕食猎物资源种群密度较低;
- (2) 野外巡护和监测网络体系尚不健全,保护和监测能力有待加强;
- (3) 不同分布区种群之间联系的生态廊道存在的阻隔因素不够明确或通行不畅,或者廊道缺失;
- (4)人与虎之间的冲突矛盾尚待很好地解决,社区群众的东北虎保护意识还需经进一步加强。
- High rate of habitat fragmentation and low density of prey;
- Undeveloped patrol and inspection system, lack of protection and inspection capacity, and short of relevant equipment;
- Unclear obstacles or blockage of corridors among different distribution areas;
- - Conflicts between tiger and human, and low local public awareness of tiger conservation.











### 二、行动目标 Objectives

到2022年,争取实现东北虎栖息地的大幅扩展和质量优化,促使东北虎种群显著增长,引导扶持东北虎分布区居民以有利于东北虎保护的方式发展经济、改善生活。

- Restoration, expansion and optimization of Amur Tiger's habitat;
- Greatly extend population of Amur Tiger;
- New paths to raise residents' living standard;
- Mitigating contradiction between stakeholders and Amur Tiger's protection.



# 三、行动区域 Action Area

# 行动区域图 Action Area



# 三个优先区 Priority Area



项目区区域位置图









# 四、行动内容概述 Action Summarize

四个行动领域 Four fields

八项具体行动 Eight actions











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领域一: 东北虎栖息地保护、扩展与优化

Field 1: Conservation, expansion and optimization of Amur Tiger's habitat

行动1:调查和确定行动区域

Action 1: Ascertaining action area by investigation.

行动内容

——东北虎、猎物资源调查Investigation of Amur Tiger and Its Prey

——栖息地状况调查与评估 Investigation and Evaluation of Amur Tiger's habitat





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# 领域一: 东北虎栖息地保护、扩展与优化

Field 1: Conservation, expansion and optimization of Amur Tiger's habitat

行动2: 东北虎栖息地保护、扩展与优化

Action 2: Conservation, expansion and optimization of Amur Tiger's habitat 行动内容:

- ——建立生态廊道
  - Constructing ecological corridors.
- ——在野生东北虎现有分布区、周边扩展区和生态廊道等区域实施全面禁猎 Preserving in Amur Tiger's habitat and ecological corridors.
- ——在非法偷猎高发区域或季节,定期组织开展行动区内的非法捕具清理活动 Cleaning instruments for illegal poaching at regular intervals in high illegal poaching areas or seasons.
- ——研究制定野生东北虎栖息地恢复技术指南
  Drawing up "Technical regulations for Amur Tiger's habitat restoration".
- ——开展栖息地恢复试点示范

Constructing habitat restoration demonstration zones









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## 领域二: 东北虎栖息地保护监测机构能力建设

Field 2: Capacity building for habitat preservation and monitoring

行动3: 健全东北虎栖息地保护监测体系

Action 3: Network construction for habitat preservation and monitoring 行动内容:

- ——分析东北虎保护及行动区域内现有保护监测机构设置情况,查找保护监测盲区 Researching blind zones of habitat preservation and monitoring
- ——在保护监测盲区增设新的保护监测机构 Establishing new institutions in blind zones
- ——科学评估,必要时依法定程序调整现有自然保护区范围
  Adjusting bound of nature reserves in accordance with legal procedures if necessary
- ——对各保护监测机构划分责任区域
  Dividing the administrative responsibility area of institutions











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# 领域二: 东北虎栖息地保护监测机构能力建设 Field 2: Capacity building for habitat preservation and monitoring

行动4: 提高东北虎栖息地保护监测能力

Action 4: Promoting capacity for habitat preservation and monitoring 行动内容:

- ——充实保护监测管理队伍 Improving the quality of staff.
- ——改善保护监测机构工作设施
  Enhancement of relevant equipment
- ——研究制定东北虎栖息地巡护监测指南
  - Drawing up "Guidebooks on habitat patrolling and monitoring"
- ——组织开展保护监测人员业务培训
  - **Training**
- ——建立保护监测机构间协调机制
  - **Establishing harmony mechanism for conservation institutions**
- ——定期评估保护管理成效
  Evaluating protection effect regularly



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# 领域三: 协调东北虎保护与当地社区的社会经济发展

Field 3: Harmonious development of community development and Amur Tiger's protection.

行动5:补偿东北虎及其猎物伤害人畜和损毁农作物等给当地居民造成的损失 Action 5: Compensation for damage or injury by Amur Tiger and their preys 行动内容:

- -研究制定补偿标准、程序
  - Drawing up compensation standard and procedure
- —设立专项资金,研究制定资金使用管理及监督检查办法
  - Establishing dedicated fund and regulation
- -定期或不定期检查资金使用情况
  - Checking up the use of the fund
- -调查当地居民对补偿的态度
  - Investigating resident's attitude to the compensation





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### 领域三: 协调东北虎保护与当地社区的社会经济发展

Field 3: Harmonious development of community development and Amur Tiger's protection.

行动6:加强对东北虎及其猎物伤害人畜和损毁农作物等情况的主动预防

Action 6: Active prevention for damage or injury by Amur Tiger and their preys 行动内容:

- ——开展宣传教育活动,普及安全防护知识
  - Propaganda and education
- ——对关键区域零散住户逐步进行集中安置
  - Concentrating separated resident in key area
- ——居民集中居住地建设防护围栏或设置隔离带
  - Constructing fences or isolation belts in residential district











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## 领域三:协调东北虎保护与当地社区的社会经济发展

Field 3: Harmonious development of community development and Amur Tiger's protection.

行动7: 有利于东北虎保护的经济发展模式试点示范

Action 7: Demonstration of tiger-friendly economy development modes 行动内容:

- ——对当地社区生产生活方式进行系统调查和评估 Investigation and evaluation of livelihood
- ——有利于保护的替代生计试点示范
  Alternative livelihood demonstration
- ——及时评估试点的经济效益和保护成效
  Evaluating economic benefit and protection effect timely





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领域四: 扩展国际合作与交流

Field 4: International cooperation and communication

行动8: 完善东北虎保护国际合作机制

Action 8: Improving international cooperation mechanism 行动内容:

- ——通过国际研讨会、双边互访等形式加强与俄罗斯、朝鲜的沟通,交流技术经验 International workshop
- ——在东北虎分布的边境区域,推动建立基层保护机构间的交流合作 Cooperation and communication between conservation institutions
- ——在边境贸易区域、口岸,推动建立基层执法机构间的信息交换和执法合作 Cooperation and communication between law enforcements











# 五、附加效益 Value-added

- (1) 本行动计划通过虎生态廊道建设、虎友好型森林经营模式和栖息地恢复区等示范 ,将加速推动中国对虎分布区栖息地恢复和扩展进程;
- (2) 本行动计划将编制和出版栖息地恢复技术标准、生态廊道建设技术规程、虎友好 型森林经营推广手册、栖息地巡护监测指南等一系列成果,使中国东北虎保护步入科 学化、规范化的轨道:
- (3) 本行动计划推动在中俄边境建立生态廊道,避免修建围栏,不仅有利于东北虎种 群,还可以促进其他野生动物种群间的交流:
- Restoration and expansion of Amur Tiger's habitat in China will be promoted by the project through demonstration of ecological corridor, tiger-friendly forest management modes, and habitat restoration.
- Amur Tiger Protection in China will be lead on a normalized and scientific track through compiling and publishing of Technical Regulations for Amur Tiger's Habitat Restoration, Technical Regulations of Amur Tiger Ecological Corridor Construction, Handbooks on Tiger-friendly Forest Management, and Guidebooks on Habitat Patrolling and Monitoring.
- Ecological Corridors instead of fences in Sino-Russia frontier in the project is beneficial not only to Amur Tiger but also to other wildlife.



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### 五、附加效益 Value-added

- (4)本行动计划将增强公众对东北虎的保护意识,同时公众对野生动物的保护意识也会相应得到增强,盗猎行为逐渐减少,人虎冲突大大缓解,促进虎分布区内社区居民和相关利益群体与东北虎和谐相处;
- (5)国家与地方环境保护能力与水平得到进一步提升,更加重视野生动物保护,推进中国在全球生物多样性保护领域的作用与影响。
- Public awareness on protection of Amur Tiger and wildlife will be greatly raised. Poaching will decrease gradually, and human-tiger conflicts will mitigate
- Environment conservation capacity will be improved, and more attention will be paid to wildlife conservation. The role of China in global biodiversity conservation will be enhanced.



# 科技技术

谢谢!

