

WWF's mission is to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature by:

- conserving the world's biological diversity;
- ensuring that the use of renewable natural resources is sustainable;
- promoting the reduction of pollution and wasteful consumption.

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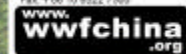
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for a living planet

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The Green Heart of China

Integrated Landscape Conservation and Sustainable Development in Giant Panda Ranges in the Upper Reaches of the Yangtze River

Let's maintain a nature home for giant pandas

In China, when all giant panda habitats are integrated as a whole network protected at landscape level, it will function like a beating green heart. In this green heart, forest and grassland are its muscle, rivers and lakes its blood, the songs of cicadas and frogs its rhythmic beats, and winds and rainbows its beautiful color. Let's join hands to protect this beating green heart. By 2010, a viable giant panda population will live in the well-managed forests of the upper reaches of the Yangtze River, which will provide ecological services to the people living in its vicinity and further downstream.



VOICES OF GIANT PANDAS

Give us some greenery, and we could survive; give us enough space, and we could grow stronger. We need the protection mankind can provide. Mankind need us too, and the harmonious future we can bring. This is the voice from our heart, and this is the hope from our soul.

We once lived in vast areas widely spread throughout the Yangtze River Plain. Mankind's large scale activities have left us isolated in the mountainous pitches of Sichuan, Shaanxi and Gansu Provinces. Paths are treacherous, friends are separated, and reunions are impossible.

With the help of mankind, our homesteads are getting greener, our tribes are getting stronger, and our buddies are being reunited.

But as things are now, our lives are not safe, nor will they ever be. We still face many challenges and threats. We are fragmented into about eighteen patches, with difficult access to one another. Breeding is limited to within small patches, causing a decline in our survival, disease resistance, and environmental adaptation. We face severe threats to our survival and reproduction.

Fortunately, we are now on a safe path home. When our all homesteads are integrated as a whole network protected at a landscape level, they will function like a beating green heart in our motherland. If we join hands to protect this beating green heart, we believe we will live together with mankind, forever in harmony.



YEARS WITH GIANT PANDAS

China



- In the 1950s, China released the Guidelines for Rare Wildlife Conservations, which brought forward the rules and scopes of nature reserve settings and protected objects.
- In the 1960s, China released the Denotes for Active Conservation and Proper Utilization of Wildlife Resources. Four nature reserves, Wolong, Baihe, Wanglang and Labahe were established for the sole purpose of giant panda conservations.
- In the 1970s, Sichuan, Shaanxi and Gansu Provinces cooperatively conducted the First National Giant Panda Survey in China. As a number of giant pandas died from starvation due to bamboo blooming in this decade, China kicked off a systematic conservation plan for the giant panda to raise awareness of its endangered population which only totaled about 2,459. China added another four nature reserves, Dafengding, Tangjiahe, Juzhaigou, and Yueba.
- In the 1980s, China issued the Circular Order of Strict Conservations on Rare Wildlife, the Emergency Notice for Strict Refraining against Poaching, Selling and Smuggling on Wildlife, and the Law of Wildlife Conservation. China and WWF have assigned the Protocol of Giant Panda Conservation Research Centers and the Understanding Memorandum for Action Plans. State Forestry Administration (SFA) and WWF cooperatively worked out the Conservation and Management Plan for Giant Pandas and its Habitats in China, and conducted the Second National Giant Panda Survey.



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- In the 1990s, China launched the Giant Panda and its Habitats Conservation Program, and comprehensively implemented the Wildlife and Plant Conservation and Nature Conservation Construction Project, Nature Forest Conservation Program and Green for Grain Program as well as others. China also ranked the Giant pandas among the top 15 species and types for conservation priorities.
- Since 2000, SFA has fully implemented the six main forestry programs, by which the existing giant panda habitats have been optimized, the capacities of nature reserves have been significantly improved, the areas covered by nature reserves have been further expanded, and the social-economical sustainable development in local communities within and outside nature reserves has been largely advanced. All these implementations have ensured that the capacities for the giant panda and its habitat conservation have been wholly improved. As of 2007, the total number of nature reserves has reached 62 with a total area of 3,248,543 ha, covering 71% of the giant panda population and 57% of its known habitat.

WWF

- WWF started its conservation of the giant panda and its habitat in China in 1980 when it was invited by the Chinese government as the first international NGO to work on nature conservation. With initial work focusing on giant panda conservation research in Wolong Nature Reserve, WWF published the first book on giant pandas—The Giant Panda in Wolong. Since then, the giant panda has attracted worldwide attention as a rare and endangered species in China.
- Cooperating with SFA, WWF has initiated the Second and Third National Giant Panda Surveys in 1985-1988 and 1999-2003, respectively. These two surveys have established a solid database for the giant panda and its habitat conservation as well as establishing nature reserve settings and management strategy.
- Cooperating with the Forestry Departments of Sichuan, Shaanxi and Gansu, WWF has promoted and improved the nature reserve system. WWF has provided funding and technical support for the

conservation of existing nature reserves and advise on new nature reserves. By these means WWF has promoted the national network system for giant panda conservations.

- Cooperating with the Forestry Departments of Sichuan, Shaanxi and Gansu, in some key areas, WWF has established a set of essential corridors like Huangtuling and Tudling to re-connect the isolated populations to increase the giant pandas' survival.
- WWF has constructed a network of management for the giant panda and its habitat conservation and established the monitoring and patrolling system for wild panda dynamics in Qingling and Minshan pilot schemes. This system will be evaluated and standardized as reference for relevant entities.
- WWF has developed a series of alternative livelihoods and energy programs for the sustainable development of local communities. It has conducted consultation and education to improve the environmental awareness of the general public to guide mankind towards a harmonious existence with nature.



WWF in Qinling

- WWF co-sponsored a ten-year research project on giant pandas in Qinling Mountains in 1980s.
- WWF supported participatory patrolling and community development in Changqing National Nature Reserve in 1999.
- WWF supported the monitoring and patrolling project in both Foping National Nature Reserve and Longsaoqing Forest Farm in 2000.
- A wildlife patrolling team was established in Houzheng Forest Plantation in September 2002. Supported by WWF, the 30-member team protected and monitored 31,167 hectares on the northern region of the Qinling Mountains.
- In 2002 WWF supported the conservation project in National Nature Reserve for the Crested Ibis of Yang County. Local communities were supported in planting green rice, and encouraged to use less pesticide and fertilizer to effectively protect the paddy field animals depended upon by the crested ibis. WWF cooperatively opened the sales market to spark enthusiasm for planting green rice by local communities to reach about 333 hectares.
- In late 2002, cooperating with WWF, Shaanxi government officially sanctioned five new nature panda reserves and five corridors for giant pandas to increase the protected areas in Qinling by 130,000 hectares. The five new nature reserves are: Noshan Qinling Reserve (8,520 ha), Ningxiang Qingniu Chuan Reserve (10,200 ha), Guanyinshan Reserve (13,534 ha), Sangyuan Reserve (13,805.7 ha) and Ningxian Reserve (26,732 ha).
- In 2003, WWF supported conservation-based community activities in Changqing Nature Reserve like cultivating salmon as an alternative livelihood, installing wood-saving stoves, supporting village infirmaries and providing small amounts of credit for community development.
- In 2003, with the aim of avoiding potential ecological

problems caused by tourism development, WWF, Xi'an Municipality and Zhouzhi County government worked together to develop a framework for integrating biodiversity conservation and tourism in the Southern Taibashan Region of Shaanxi province.

- To recognize and acknowledge the efforts and promises in conservation of giant panda habitats, WWF issued the certificate of "Gift to the Earth" to Shaanxi provincial governors in April 2003. Qinling Giant Panda Habitat Conservation Networking Construction Project was taken as "the Gift to the Earth", which symbolized the coming of a new era of conservation cooperation between WWF and Shaanxi Governors.
- Cooperating with Xi'an Children's Palace, WWF held an arts exhibition, "Qinling — Story of the Panda's Home, Sino-Dutch Children's Art Competition Exhibition", in Xi'an Children's Palace in September 2003. The exhibition educated children in the Shaanxi Province on the living situation of giant pandas in Qinling and raised their awareness of nature conservation at an early age. Over 100 pieces of artwork were selected from 4,000 Chinese paintings and 800 Dutch paintings.
- In 2004 WWF collaborated in the design of the nature reserve management plan for Laoxianchang Nature Reserve to promote a standardized management policy.
- WWF supported the eco-tourism in Heihe Forest Park in 2004. After extensive training the staff in the park thoroughly understand the important role of eco-tourism. Eco-tourism infrastructure, like logical roads, giant panda gardens, and harmony gardens, has been constructed to guide tourists to help reduce their environmental impact on the Houzhengzi Corridor.
- WWF have supported the Phase II of the Qinling Conservation and Economic Development project in 2005-2007.
- In 2005, WWF supported the Shaanxi Forestry Department

in developing a Master Plan for the Conservation of the Giant Panda and its Habitat in Shaanxi Province. Based on the Third National Giant Panda Survey, the project promoted the scientific and standardized panda conservation management plan by combining it with the international methodology of management.

- In 2005, cooperating with Guanyinshan Nature Reserve, WWF conducted a social and economical inventory of the tunnel areas of the 108 national road, which provided useful information for managing the panda habitat of the Qinling corridor. Around 100 hectares of bamboo were planted along this corridor to promote the comprehensive management of giant panda habitats and corridors in Qinling. In addition, WWF supported the social and economical investigation along the National Road 108 tunnel areas, developing the Xinfu Bee Breeding and wood-saving stove project, which played an important role in re-connecting the isolated populations between Xinlongjing and Tianhuashan.
- In 2005, cooperating with the Shaanxi Forestry Department, WWF launched the resume publication of the journal named Qinling to attain consultation and education on wildlife and nature reserve conservation. By June 2007, three publications on key species, Giant Panda, Crested Ibis and Golden Monkey, had been released. Four publications on nature reserves like Guanyinshan Nature Reserve, Tabacehan Nature Reserve, Laoxianchang Nature Reserve and Qingshan Nature Reserve had been issued. These publications have promoted consultation and education to the public.
- By 2006, a system of management for the giant pandas and its habitats in all nature reserves has been enforced. Monitoring and patrolling facilitated a solid base for the scientific management in Qinling Area. Currently, 312 lines have been established, and full data, including biodiversity levels, have been collected for 5,022 lines. This progress has been recognized by SFA as a pilot scheme. WWF has released 251 pieces of monitoring and patrolling equipment, and organized 8 training sessions to increase the skill of staff in nature reserves.



On April 23, 2003, the provincial County Representatives of WWF China (in Harbors) with volunteers

In June 2006 WWF and Northwest Agriculture and Forestry University dispatched college volunteers majoring in agriculture, forestry, husbandry and other associated backgrounds to local communities to collect first-hand socio-economic data. With strong support from experts, the volunteers provided extensive training to village farmers. With the combined efforts of volunteers and experts, local communities took a more active responsibility for conservation.

- In 2006, WWF completed the launch of small credit projects in communities neighboring the giant panda habitats to support alternative livelihoods such as livestock breeding, vegetable plantations, medicinal herb plantation, biogas construction, and eco-tourism to increase the income of the local communities thus reducing their dependency on resources taken directly from panda habitats.
- In 2006, WWF established the environmental education center and bamboo forest garden of tourist education to promote the potential and employment opportunities in nature reserves. The education center is a milestone showing that WWF has achieved great progress in eco-tourism and environmental education.
- In 2006, WWF launched the allied anti-poaching action by Sichuan, Shaanxi and Gansu Provinces. Through this anti-poaching action led by Gannashuan Nature Reserve, it is first time to break down the provincial boundaries. 20 snares have been cleared, and more than 200 restaurants and drugstores have been inspected, and more than 2,000 leaflets have been released for consultation and education.
- In 2007, cooperating with Shaanxi League Member Committee and Shaanxi Forestry Department, WWF co-organized the Qinling Youth Ambassador project. It attracted more than 200 university students from 9 universities as its first ambassadors to visit 19 local communities close to giant panda habitats in Qinling. The ambassadors spent 16 days providing



County Representatives of WWF China (Central CV Bureau) planting bamboo at National Road 108 corridor

technical consultancy for the thousand percent award, and collecting socio-economic data. With the objective "Serve for Qinling Ecological Conservation, Develop Community Green Economy", these ambassadors established a bridge for consultation, education and technical exchanges between universities and communities to promote the ecological conservation and development of a green economy to promote better conservation of giant panda habitats in Qinling.

- In 2007, WWF promoted the Heihe Forest Park in Qinling to be an ecotourism model of National Forest Parks. WWF supported the construction of a tourism information center to promote the park as AAA rank. A well-balanced development between nature reserve conservation and tourism development has been established.
- In 2007, WWF supported the local community development project in the National Nature Reserve for the crested ibis in Shaanxi Province. WWF supported 10 farmhouses with funding of 10,000 RMB and 2 fruit storage vaults with funding of 20,000 RMB. It also erected Crested Ibis viewing platforms 100 meters away from camp sites and established boundaries 1,200 meters away from nesting sites to prevent interference by visitors on bird activities.
- By June 2007, WWF had supported a total of 150 conservation projects and developments, and 60 cooperative partners had been fostered within 6 years. WWF had built 519 wood-saving stoves, 63 households for rural grand time, and 241 Chinese beekeeping households. WWF has organized about 100 training sessions, and trained 5,543 villagers.
- By June 2007, WWF had produced 24 publications, including the Monitoring and Patrolling Regulations, Concience Techniques on Chinese beekeeping, Planting Techniques on Key Chinese Medicinal Herbs in Qinling. More than 100,000 leaflets have been publicized for consultancy and education serving nature reserve conservation and community requirements.



WWF Qinling volunteers communicating with villagers for Chinese medicinal herbs

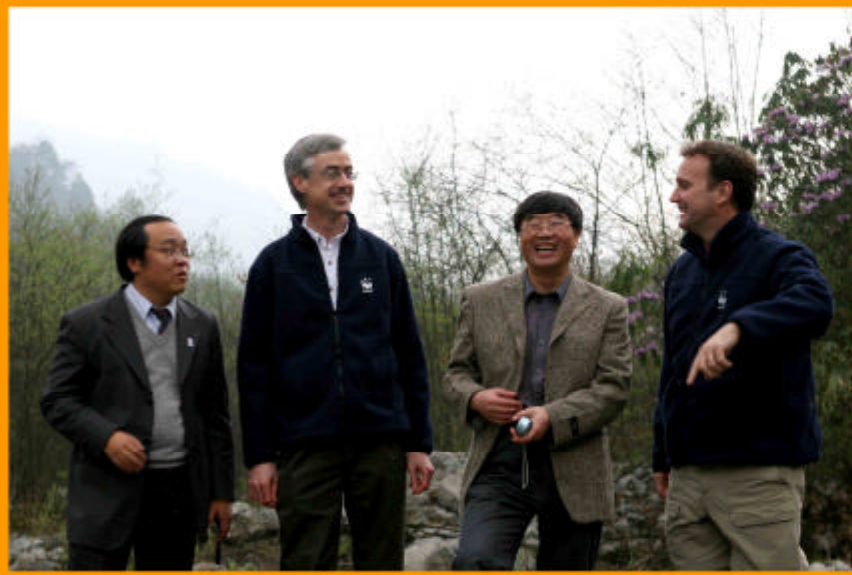
WWF in Minshan

- In the 1990s, WWF made Minshan Landscape its priority area and initiated the "Integrated Conservation and Development Project" to help protect the giant panda and its habitats in Pingwu County.
- In July 1997, with the aim of supporting Pingwu County as a conservation pilot scheme, WWF and its partners initiated the Pingwu Integrated Conservation Development Project.
- In 2000, WWF started to work in the Forests of the Upper Yangtze which was one of the Global 200 eco-regions in which Minshan was included. The eco-region conservation strategy was conducted in the Minshan Initiative.
- WWF has established eco-tourism pilot schemes in Wanglang, Juzhaigou, Bashuhe Nature Reserves and Laohegou Forest Farm to promote the biodiversity conservation and sustainable development of these areas.
- In March 2002, WWF worked with the Chinese Academy of Sciences to define key species and their habitats, and worked out the numeric species maps for Beishuan, Qinshuan, Sunpan, Juzhaigou, Pingwu and Maoxian.
- In 2002, WWF and the Sichuan Forestry Department established a network of Geographical Information System (GIS) to ensure the concise and available display of the collected data from Minshan.
- In 2002, WWF and Sichuan Academies of Social Sciences worked to conduct the socio-economic investigations in Pingwu, Beishuan, Juzhaigou Maoxian, Qinshuan, Wenshan and Songpan, 20 villages from 5 counties have been taken as pilots for alternative livelihood. By 2006, 1,223 biogas stoves, 576 energy-saving stoves and 187 high efficient stoves have been built.
- In 2002, WWF provided technical training on the planting of Chinese medicinal herbs and livestock breeding from which 400 households benefited.
- In 2002, WWF and experts from agriculture, water conservancy, mining, road construction, city construction and forestry departments had a workshop to define, and prioritize, the threats to biodiversity and started the Minshan Conservation Project.
- In 2003, with WWF's support, Governments in Mao County agreed to include tunnels in Taiding highway construction. Natural vegetation was restored and the giant panda habitats alongside the road were re-connected.

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- In 2003, WWF supported the Sichuan Forestry Department to draft out the tourism development plan in Minshan. The draft took suggestions from the Sichuan Tourism Department, relevant governments and investing County stakeholders into account to balance the biodiversity conservation and tourism development.
- In 2003, with WWF's support, Xuebaoding and Xiaohogou Nature Reserves expanded from 29,790 and 14,000 hectares to 63,815 and 26,000 hectares, respectively.
- In 2003, with WWF's support, 17 nature reserves in Minshan conducted the first allied anti-poaching action to establish a conservation network for the giant panda and its habitat focusing on monitoring, skill training and anti-poaching activities.
- In 2003, WWF and Carrefour signed an agreement to cooperatively promote Non-Timber Forest Products from giant panda nature reserves to improve the life conditions of local communities.
- WWF has supported enforcement of the effective management of giant panda habitats in Laohegou Forest Farm of Pingwu Nature Reserve since 2004.
- In 2004, coordinated by WWF, different stakeholders agreed to establish a co-managed mechanism in Huanqiang-Huowu. They stated that a total area of 100,000 ha of giant panda habitat had been effectively conserved through a balance between conservation and development.
- Since 2004, WWF has cooperated with Carrefour to hold exhibitions of non-timber forest products to promote market sales for agricultural and forest products like Honey and Pepper from giant panda habitats. A long-term effective mechanism for market sales has been established. By 2007, four exhibitions had been successfully held, covering 10 big cities like Beijing, Shanghai, Chengde, Chongqing and Guangzhou. Through exhibitions, WWF has opened market opportunities for local communities and has ensured un-polluted, non-timber forest products of good quality are available to consumers. 260 households have benefited.
- In 2004, with WWF's support, Baozuo and Longshishi Nature Reserves were newly established.
- In 2005, with WWF's support, A'xia, Du'er and Chaganglang Nature Reserves have been newly established, and Baodinggou Nature Reserve was expanded. The integrated giant panda habitats in Minshan have been re-connected, recovered and effectively protected through these activities.
- In 2005, WWF promoted the effective management on giant panda habitats governed by Pingwu Forestry Development Company and Nanping Forestry Department.
- In 2006, with WWF's support, Sichuan and Gansu Forestry Departments cooperatively organized a skill contest on monitoring and patrolling in giant panda nature reserves. Attendees exchanged experiences, tested their own skills, and promoted the talent of monitoring and patrolling staff.
- In 2006, WWF organized the 1st Ecological Photography Training Campaign in Minshan and invited famous photographers to teach. Over 30 participants from Minshan Nature Reserves, local NGOs and general public attended this campaign. This training not only increased the scope of data collection by nature reserves staff, but also publicized the conservation achievements made by WWF in Minshan.
- To recognize the efforts and promise in the conservation of the giant panda and its habitat, WWF presented a certificate of "Gift to the Earth" to two Governors from Sichuan and Gansu Provinces in October 2006. The two governors jointly committed 1,5024 million hectares for giant pandas in Minshan. The honor symbolized the coming of a new era of conservation cooperation between WWF and the two provinces.
- By 2006, in cooperation with Sichuan and Gansu Forestry Departments, WWF established an effective monitoring and patrolling system for wild giant pandas. WWF has made efforts towards its standardization.
- In 2007, cooperating with Ya'an Government and Wild China Film, WWF co-organized the 2nd wildlife photographic training session. Over 60 "Shutterbugs" from nature reserve.
- staffs in Minshan and Qionglashan, local NGOs and the general public received training to enhance their potential skills. An ecological photographic network has been established through a series of activities in Sichuan.
- In 2007, WWF and the Carrefour Fund developed the community development project in Shuruo and Seba villages near Baodinggou Nature Reserve to improve the basic utilities, medical and educational conditions for the Qiang Minority.
- In 2007, WWF helped the women in Mao County establish a women's group for Qiang minority embroidery, and helped them development their cultural heritage for the production of embroidery products. In June 2007, WWF opened its annual conference in Beijing and all attendees received one piece of embroidery.
- In 2007, WWF and Sichuan University cooperatively developed a book on Culture-Biodiversity Conservation as an essential teaching material for science and arts undergraduates and graduates in Sichuan University. Through consultation and education on traditional knowledge, culture and biodiversity, awareness for conservation on the giant panda and its habitats has been promoted.
- In 2007, WWF supported 5 wildlife photography volunteers to take photos in Rus'ergai grassland, home of Black-necked crane, for one week. These photos educated and communicated the beauty of this marvelous grassland to the outside world.
- So far as now, WWF has established some essential corridors like Huangtuling and Taiding to re-connect the integrated giant panda habitats over Sichuan and Gansu Provinces.





SURVIVAL STATUS OF GIANT PANDAS

Although some significant achievements in giant panda conservation have been made, giant pandas still face many severe threats towards their long-term survival and reproduction. Degradation and the loss and fragmentation of giant panda habitats caused by large scale of human activities will continue in the long-term.

Survival Status



Currently, giant panda habitats are isolated to four mountainous pitches of Qinqing in Shaanxi Province, Minshan in Sichuan and Gansu Provinces, and Qionglai, Langshan and Xiangling in Sichuan Province. According to the 3rd National Giant Panda Survey, its population totals about 1,600 individuals. This population is fragmented into approximately 18 smaller populations.

In the past 50 years, giant panda habitat has been degraded, lost and fragmented due to large scale human activities like farming, grazing, poaching, herb and bamboo harvesting. In particular, current infrastructure developments like road construction, mining, dams, and mass tourism, etc. pose the greatest threat.

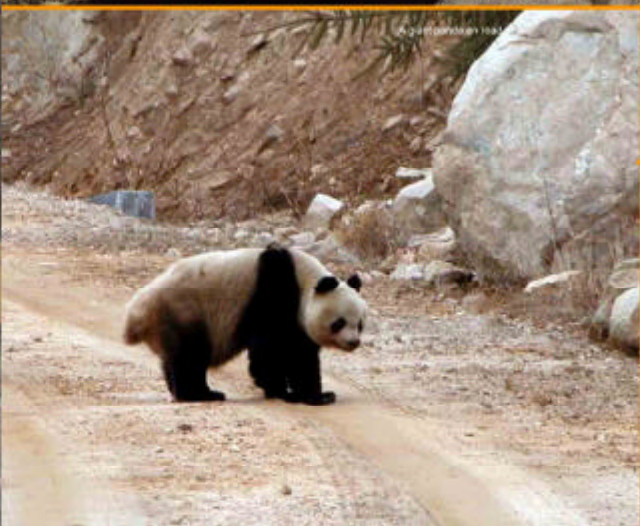
The population isolation and its small size have caused inbreeding. This has led to the further decline in small populations, environmental adaptations and disease resistance. This decrease in their survival abilities has led to the total loss of some small isolated populations.

There is still much to do in the conservation of the giant panda and its habitats. 43% of giant panda habitats and 29% of its population are not yet effectively protected by nature reserves and protected areas. In addition, with large construction projects and the further economic exploitation of natural resources, there are still many severe threats and challenges for the conservation of the giant panda and its habitats.



Threats

Although we have made significant progress towards the conservation of the giant panda and its habitats, their survival and reproduction is still not assured. There are still many threats for degradation, loss and fragmentation of giant panda habitats. According to existing data and WWF research, current threats like logging, poaching, grazing, and farming, etc. have not yet been eliminated. New threats and challenges derived from large scale infrastructure development like road construction, mining, mass tourism, dams, etc. have also yet to be resolved.





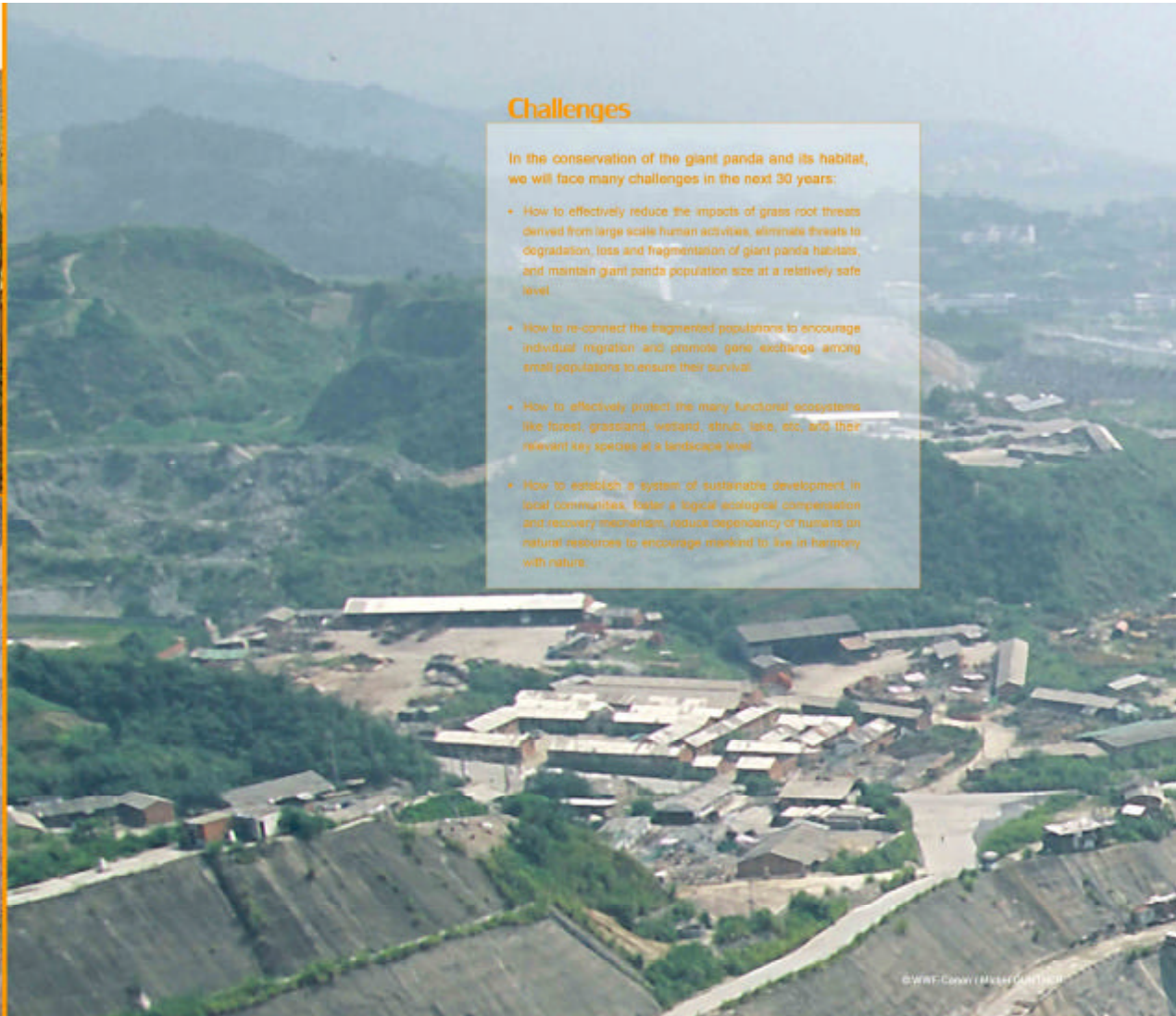
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Minzq



Challenges

In the conservation of the giant panda and its habitat, we will face many challenges in the next 30 years:

- How to effectively reduce the impacts of grass root threats derived from large scale human activities, eliminate threats to degradation, loss and fragmentation of giant panda habitats, and maintain giant panda population size at a relatively safe level
- How to re-connect the fragmented populations to encourage individual migration and promote gene exchange among small populations to ensure their survival.
- How to effectively protect the many functional ecosystems like forest, grassland, wetland, shrub, lake, etc, and their relevant key species at a landscape level
- How to establish a system of sustainable development in local communities, foster a logical ecological compensation and recovery mechanism, reduce dependency of humans on natural resources to encourage mankind to live in harmony with nature.

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Opportunities

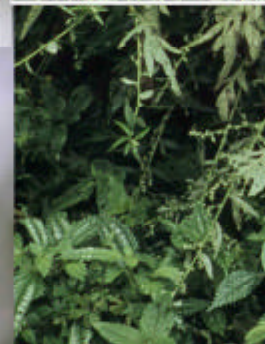
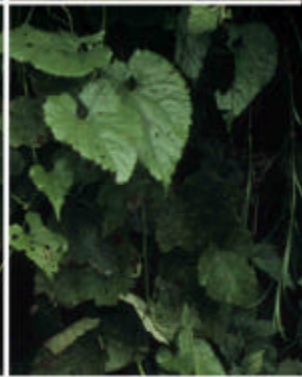
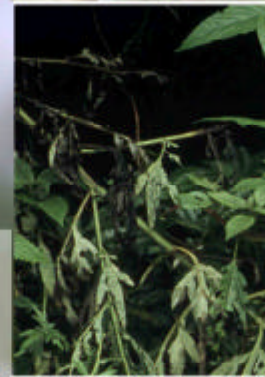
Due to big efforts by the Chinese government and WWF, the number of giant pandas in the wild has increased when compared to the 1990s. By 2007, a total of 62 nature reserves had been established, covering 71% of the giant panda population and effectively protecting 57% of its habitats.

Many essential corridors have been established and re-covered in vegetation. These corridors have played pioneering roles, and partially re-connected the isolated populations. Field monitoring shows that giant pandas have migrated and expanded their habitats through these corridors.

The giant panda field monitoring and patrolling system has been established, and the data collection, processing and management system is being currently standardized and expanded to develop its applications.

With alternative energy and sustainable livelihoods as a foundation, a sustainable development demonstration system for local communities has been established. Large scale human activities have been effectively controlled, and the conflicts between mankind and wildlife have, for the most part, subsided.

With effective implementation and execution of laws and regulations at national and local levels, and profound consultation and education, the conservation of the giant panda and its habitats have the strong backing of policy and public support.



THE GREEN HEART OF CHINA

—Integrated Landscape Conservation and Sustainable Development in Giant Panda Ranges in the Upper Reaches of the Yangtze River



Facing challenges and opportunities over a wide range of land use issues, WWF has launched its magnificent program for conservations of giant panda and its habitats—"The Green Heart of China-Integrated Landscape Conservation and Sustainable Development in Giant Panda Ranges in the Upper Reaches of the Yangtze River". When all habitats of giant pandas in China are integrated in a network protected at landscape level, it will function like a beating green heart. Let's join hands to protect this beating green heart, protect its eco-systems like forest, grassland, wetland, lakes and their relevant key species at a landscape level, and we believe we can leave a living future for giant pandas.

Background

The scope of this program covers 4 mountainous landscapes of Qinling, Mianzhan, Qionglai, Liangshan-Xiangling in Sichuan, Shaanxi and Gansu Provinces. It includes 194 towns, 45 counties and 16 prefectures with a human population of nearly one million located in giant panda distributed areas. One-third of the population is minorities, and a large number of towns and counties are national ranked as "poor".

The scope of this program covers many functional eco-systems like forest, shrub, grassland, wetland, lakes, etc. The area is rich in fauna and flora with over 40 animal species ranked in national I and II categories, 62 mammals, 37 birds, 5 reptiles, and 58 amphibians, and over 3500 endemic plant species.

The program area is the water source for both the Yangtze and Yellow Rivers, and both rivers flow through large cities like Chengdu, Changqing, and Xi'an, providing billions of people with water in middle and down stream areas.

This program includes 5 modules, a national component, Qinling, Mianzhan, Qionglai and Liangshan-Xiangling landscapes. Each module has its own specific objectives, but together they share an optimal vision and objective.





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National Components Module

- Review and evaluate the impacts of national policies, regulations, and relevant large scale programme policies on conservation of the giant panda and its habitats. Based on systematic evaluations, WWF will provide relevant suggestions for planning and improvements of relevant policies on giant panda conservation.
- Research and evaluate the impact of roads, dams and mining on the conservation of the giant panda and its habitats and undertake environment impact assessments to provide essential indicators for biodiversity and environmental assessment.
- Perform gap analysis for conservation of the giant panda and its habitats in Qinling and Minshan landscapes to deeply understand the degree of habitat degradation, loss, fragmentation, and population isolation to effectively increase the conservation of existing habitats, expand the potential habitats, and establish and protect the essential corridors.
- Evaluate the monitoring and patrolling system conducted by WWF in Qinling and Minshan landscapes through assessing experiences and shortcomings, and then standardize as reference for relevant entities in the future conservation of the giant panda and its habitats.
- Release abbreviated Chinese and English versions of the 3rd National Giant Panda Survey Report to raise public awareness in China and abroad on the survival status of giant pandas and promote all partners' active involvement in giant panda conservation.
- Encourage communication and education to expand public awareness and involvement in the conservation of giant pandas and their habitats.



Qinling Landscape Module

- Conservation of giant pandas and other rare and endangered species by systems like sustainable forest management, wetland eco-systems and Chinese herbal medicine resources in Qinling at a landscape level.
- Improve the structure of the monitoring and patrolling system of the giant panda and its habitats to create a scientific database of dynamics for its conservation.
- Evaluate the corridors in Qinling to develop an effective management plan to comprehensively include the development and conservation of corridors to facilitate their roles in connecting the different giant panda populations.
- Focus on the further development of Nature Reserves and their Staff in all Nature Reserves in Qinling.
- To facilitate other relevant bodies conducting conservation work on the giant panda and its habitats such as the effects of infrastructures like road, dams and unsustainable forest management within giant panda habitats.
- To use sustainable forest pilot schemes in priority areas to develop detailed action plans to promote the further development of forestry departments and keep a balance between the forest ecosystem and social-economy.
- Under the reform of forest ownership systems, actively cooperate with relevant nature reserves, forest farm and communities to investigate the resources within the pilot schemes and work out feasible, community owned, forest management plans.
- Actively cooperate with local forestry departments to expand the concept of "high conservation value forest" to develop the management guidelines for high value conservation forest pilot schemes in Qinling.
- Continue to focus on wetland eco-system conservation, particularly key species like the Crested Ibis, and to encourage specialized agriculture, like green rice, to keep a balance between species conservation and sustainable agricultural development.
- Promote alternative livelihoods in priority communities to improve productivity and the quality of life of local communities around giant panda habitats in Qinling to encourage the environment-orientated industry.
- Provide guidance in the planting of Chinese herbal medicines in local communities to increase income and conservation awareness. In addition, to support the certification of Chinese herbal medicines to establish a market position, thus promoting the sustainable production and conservation of Chinese herbal medicines in Qinling.
- Take successful experiences of eco-tourism to expand upon pilot schemes, and to develop an overall strategy for eco-tourism in Qinling. Through feasibility studies, the weak ecological areas will effectively be protected and the pressures on nature resources derived from tourism will be reduced.
- Expand communication and education in local communities to enforce the community awareness of the sustainable use of natural resources, and attract communities to get involved in conservation and live in harmony with nature.

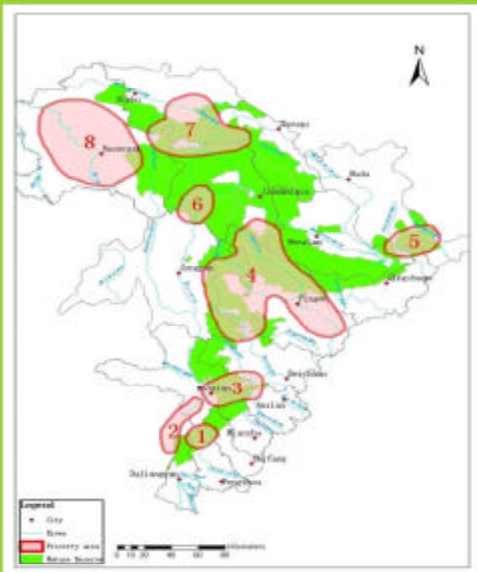




WWF's information center



Feeling in Yi



Minshan Landscape Module

- Continue to support the unified monitoring, patrolling and anti-poaching systems in 27 nature reserves in Minshan district to provide concise and scientific data. The data collection, processing and management system will be standardized to gradually improve the data-base and decrease the inferences of illegal human activities on giant panda habitats.
- Continue to promote the vegetation recovery of Tuding corridor by patrol enforcement around the area and to promote the tunnel establishment by Sichuan Provincial government and Mao County government.
- Continue to promote the further development of nature reserves and forest farms and industry, enforce the effective management of giant panda habitats, and provide the training resources for projects such as management, monitoring and patrolling guidance, database usage, GIS, plant and animal species recognition, ecological photography, etc.

- Continue to expand forest certification for the partners in Minshan, improve the management capacities of sustainable forest use on nature reserves and forest farms, and work out detailed management plans, to balance the development between biodiversity conservation and natural resource use, and improve the low economic conditions of local communities.
- To cooperate with local community owners of forest to reform and search for new systems, and establish more pilot forest management systems in giant panda habitats in Minshan, and to search for more effective ways to keep balance between natural resource use and biodiversity conservation.
- Recommend the concepts and standards of high value forest so cooperative partners can integrate the standards of high conservation value forest into a management plan for Minshan, and monitor the selected forest with high conservation value forest priorities.
- Continue to expand successful alternative livelihoods and energy pilot schemes in Minshan to decrease the dependency of local communities on the natural resources in giant panda habitats, thus improving the life conditions of the local communities. To continue to cooperate with business partners like Carrefour to open market positions for local forest and agricultural products to increase the productivity of local communities and develop the local economy.
- Publicize sustainable use concepts and guide communities to plant Chinese medicinal herbs to increase income and promote awareness of Chinese medicinal herbs. In addition, to get local communities involved in the monitoring of Chinese medicinal herbs. WWF also supports the certification of the Chinese medicinal herbs to establish a market position to promote the sustainable use and conservation of Chinese medicinal herbs in Minshan.
- Attempt to include the giant panda nature reserves as pilot schemes in comprehensive tourism management plans. Cooperating with other environmental conservation organizations, WWF will influence tourism planning, implementation and expansion at provincial level to reduce the negative effects of mass tourism on giant panda habitats and to promote the local tourism to include the speciality of minorities in giant panda habitats, and expand its successful development.
- Using the successful example in Minshan, communications and education will be expanded to all targets to increase awareness of the sustainable use of natural resources in local communities and to encourage communities to become involved in conservation and live in



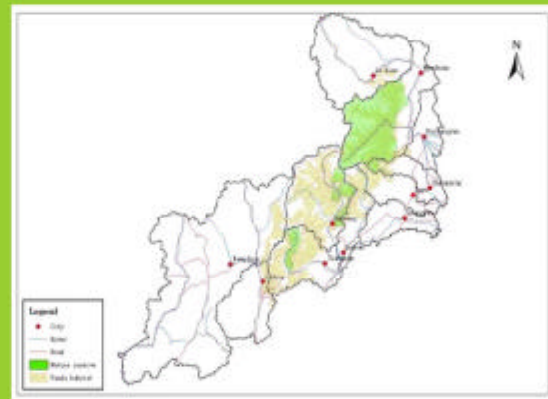
The Auzhaiyou Nature Reserve



Bee keeping - CWAC/Carven/Claw/DOOLE



Fireplace



Qionglai Mountain Landscape Module

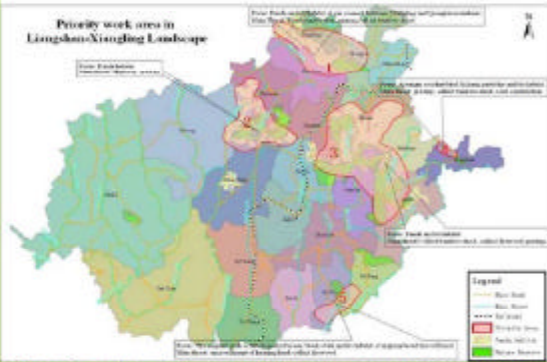
- Effectively conserve the existing habitats and analyze the potential habitat gaps to establish essential corridors to re-connect the isolated populations.
- Evaluate the current threats to the giant panda and its habitat to provide valuable suggestions.
- Evaluate the effect of climate change on the giant panda and its habitat in Minshan and Liangshan-Xiangling landscapes to select vital forest areas to protect.
- Protect the wetland, water resources and other key relevant species in giant panda habitats.
- Conduct training for managers in giant panda nature reserves and expand to a grass roots level.
- Conduct research on giant panda conservation and relevant policies to consummate the giant panda conservation network and establish a long-term database on conservation of giant panda and its habitats.
- Promote alternative livelihoods, energy resources, and eco-tourism for sustainable development of local communities.
- Expand consultation and education to strengthen ecological culture and civilization and win increasing support for giant panda conservation from key stakeholders and the general public. To lead national policies and local regulations to benefit to conservation of giant panda, its habitats and related species.



The Wolong Nature Reserve

Liangshan-Xiangling Module

- Develop community economy on sustainable products (organic pork, agarics, Bamboo, traditional Chinese medicine, economic wood)
- Ecological migration
- Provide technical training for indigenous people and encourage them in enterprise.
- Explore alternative livelihood and energy projects.
- Continue to undertake "Nature Forest Conservation Project" and "Converting the Land for Forestry and Pasture Project".
- Provide training to local leaders and staff of NR.
- Establish new nature reserves and expand the existing nature reserves (Jiapo, Ebian, Laojunshan, Jintouhe, Ganuo, Yanyuan, Conggou, Sanhe, etc)
- Provide training on eco-tourism, planting and breeding for forest farm staff.
- Carry out baseline surveys and special surveys in nature reserves.
- Establish an ecological compensation mechanism.
- Establish the ecological recovery pilot scheme system.
- Establish essential corridors through fences and culverts in expressway construction.
- Strengthen patrolling and monitoring.
- Establish and improve the execution of law in giant panda nature reserves.
- Conduct consultation and education with the general public.
- Actively communicate with local governments to develop independent projects.
- Establish a joint defense mechanism for the conservation of giant pandas and other wildlife.
- Establish the GIS database in giant panda nature reserves.





Objectives

- By 2030, those threats that cause the degradation, loss and fragmentation of giant panda habitats will be comprehensively managed and large scale human activities affecting the survival and reproduction of giant pandas will be effectively decreased or eliminated.
- The size of existing nature reserves will be increased, optimized and well managed, and potential habitats will be largely expanded. More essential corridors will be established, through which the fragmented patches of Qinling, Minshan, Qionglai, and Liangshan-Xiangling landscapes will be integrated as a whole network for free migration and gene exchange of giant panda individuals from one to another. The giant panda population will be increased to a safer level.
- Pioneering alternative energy and livelihood sources, a sustainable socio-economic development system will be fully established in local communities. An ecological compensation and restoration mechanism will be fostered, and consultation and education will be promoted to significantly benefit the public. A policy and general public support system will be founded for giant panda conservation and the environment.
- Those functional eco-systems like forest, shrub, grassland, wetland, lakes, etc. and relevant key rare and/or endangered species like golden monkeys, crested ibis, etc. will be comprehensively conserved at a landscape level. People will live harmoniously with nature.



Vision

By 2030, a viable giant panda population will be living in the well-managed forests of the upper reaches of the Yangtze River, which in turn will provide ecological services to the people living in its vicinity and further downstream.



HOPES OF GIANT PANDAS

In the past 30 years, mankind has made huge efforts and obtained marvelous achievements. In the next 30 years, you will continue with hopes and power. Breaking through waves and rocks on our voyage home, let's join hands to protect this beating green heart of China. We believe we will live together with mankind, forever in harmony.

