

## **INFRARED CAMERAS FOR QINLING PANDA LANDSCAPE**



WWF donated infrared cameras for Qinling Panda Landscape.  $\hbox{@}$  WWF/Hao

From March 30th to April 2nd, WWF Xi'an Programme Office initiated a camera traps application training programme in Shaanxi Pingheliang nature reserve. More than 50 rangers and staffs, from about 10 nature reserves and forest farms (many of which are from the eastern Qinling Mountains), have participated this event. Before the training started, WWF Xi'an Programme Office has also provided more than 100 infrared cameras to these conservation partners.

WWF hoped that the donation of these infrared cameras can be a

helpful tool to assist conventional monitoring and patrolling work in Qinling. Also, more accurate data and documents can be collected as a support for network management and policy decisions on Qinling giant panda and biodiversity conservations in the future.

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During the 4 days training, 3 guest speakers, respectively from Peking University, Shaanxi Institute of Zoology and Changqing National Nature Reserve, have demonstrated the great advantages of camera trapping in wildlife research and conservation, as well as their personal knowledge and experience on applications and placement techniques.

Wang Fang, doctor of philosophy in zoology from Peking University, one of the guest speakers. From varieties of his research experiences on many large-bodied animals, he believes that camera trapping is a very helpful tool in wildlife research and conservation.

He stressed that camera traps are not only about pictures. They are very useful observation method, which provide objective and accurate data can be viewed by many people. From his research experiences in western China, he concluded that its research applications may include the detection of new or rare species, estimation of population size and richness, determining animal behavioral, activity rhythm and migration patterns. In fact, there are more questions that have yet to be known; he added; however, answering these questions may not only require money and time investment, but more collaboration efforts on sharing knowledge and skills. He is glad to see that WWF has been working on both.

Zhang Ximing, from Changqing national nature reserve, with rich experience of using camera traps. He believes that camera trapping is not only efficient on detection of rare and new species, it is also a cost effective tool for conservation and communication. It can be

very helpful for biodiversity conservation and management at policy level; also, it improves people's capacities and skills at the frontline. Moreover, it is very helpful to enrich public's knowledge on nature conservation and animals; raise one's awareness on biological conservation importance.

He pointed out, although camera traps are a great monitoring tool, it is only a supplement. The identification of no presence of one animal does not necessarily mean its inexistence. He said, sometimes, the reason for capturing no valuable data varies from many reasons. It can be the site selection, sensor and camera equipment, or the weather conditions.

Wu Xiaomin, senior researcher from Shaanxi Institute of Zoology, he believes that camera traps are cost effective tools for many long-term monitoring researches and observations. They work 24 hours 7 days, around the clock; and they can collect a large amount of accurate data and information for researches.

In his presentation, he had shown us many of his participated researches with using camera trapping method, including 1) observation researches on wildlife crossings along the famous Oinghai-Tibet Railway (impact observation researches and studies on migration of Tibetan antelope and other wild animals in the area), 2) joint researches with WWF on Qinling giant panda corridor use over 108 road Qinling tunnel, and 3) the latest biodiversity baseline surveys on Xi'an-Chengdu high speed railway construction.

 $\textit{Mr Wang Fang (Up), Zhang Ximing (Middle), and Wu Xiaomin (Low).} \ \textcircled{\tiny C} \ \textit{WWF/Hao Liang.}$ 

## Feature Stories: Passion for Nature

My name is Hao Liang, from WWF Xi'an Programme Office. I feel lucky to be able to join this training programme this time, to learn more about new conservation method and technologies. I'm also very happy to see the great interest all the rangers have shown to this activity. But, more than that, when

I look back to this four days training and recollect all the conversation I have had with all the scholars, experts and rangers, I wondered and kept asking myself a question: what makes these people so fond of this job? I tried hard and found out many answers; however, the best one is the Passion. It is not any of those short-lived impulses in one's life but commitment and a life-long passion for nature. As someone said to me, they just fond of being out in nature, they live on it, they respect it, and they want to protect it.

His name is Yan Gengxi, 41 years old, from Tianhuashan National Nature Reserve in eastern Qinling giant panda conservation network.

Like many of his colleagues, he was working in logging industry before the establishment of this nature reserve. Since the national forest protection project started in late 1990s, many of his colleagues and him have changed their jobs from collecting timbers to forest protection. Now, they have been protecting and preserving this nature reserve for more than a decade.

I recalled that when we were traveling to the outdoor training site (2300 meters high, at the top of Pingheliang Mountain) we had a small talk on the difficulty of their field works. He told me that one of the most dangerous things in the field should be the unpredictable weather, i.e. the thunder and lightning rain storms. He said that, he had experienced a real bad weather last summer in 2012, while he and his colleagues were in the middle of doing giant pandas investigations. That time, under the cloud, the flash was just right next to them, and they all smelled the burning air. It was a very terrible experience, he added; but the worst thing is that there was no place to hide on that occasion, the only thing they can do on that day was to escape to a lower place as fast as they can.

In fact, I have got to know more about a ranger's life from him and other rangers. Ma Shiping, deputy head of the conservation dept. in Tianhuashan nature reserve, he told me that the farthest camp site in Tianhuashan is more than 40 kilometers, all by walk. They have to carry food, supplies and equipment by themselves. Usually, investigations next to a camp site with that distance would last for a week. And, for the most of time there is no road, they have to stay low and use animal crossings in the forest or break open ways through underwood and bamboo forest. Most of all, they have to watch every single step really careful in some area, where it is impossible to identify cliffs on GPS, they know one small mistake may lead to a fatal injury, or death.

Ma also mentioned that, normally, their knowledge on wild animals (such as giant panda, leopard, musk deer, etc.) is largely based on historical data and human observations. Only a few people with rich field experience are able to see these animals once in a while,

because wild animals are very sensitive to human interference. They are nimble and move very fast in forest. He hoped that camera traps can provide more vivid pictures, which can be viewed by as many people as possible. It would be very helpful for both investigations and communications for nature reserves.

Dang Xiaowei, from Qingmuchuan nature reserve, he told me that they have learned many advantages of camera traps since WWF introduced the technology early before this year. He told me the training was very helpful and hoped that these cameras would help them collect more animal pictures in the region, including giant panda. He also pointed out that, photographing animals in the wild not only tests photographer's experience in the wild, but also requires one's strength, perseverance and a bit of luck.

### **Additional Information:**

Generally, eastern Qinling giant panda conservation network contains Tianhuashan nature reserve, Caiziping corridor, Huangguanshan nature reserve and Pingheliang nature reserve. The region constituted a habitat connecting area for three subpopulation groups of Qinling giant pandas, respectively are Tianhuashan, Jinjiliang and Pingheliang populations. According to the 3rd national giant panda survey in early 2000s, there are approximately 23 wild giant pandas in this region.

# A GREAT TRANSFORMATION: FROM AN ANIMAL KILLER TO A PROTECTIONIST

My name is Fu Qiang, 36 years old, born in Zhugen village, Chongzhou City of Sichuan Province, near Anzihe Nature Reserve where I work for as a conservation officer. However, as a village man who was raised by hunting culture from elder generation, I would have never pictured that my hunting skills and knowledge would help protect wild animals.

The change happened in 1996, when my job was allocated in Anzihe Nature Reserve, where I made good use of my hunting skills and knowledge to save wild animals instead of capturing them. I started my work with routine patrolling and monitoring. The experiences of hunting gave me lots of information of the mountains. For example, I knew the areas where the animals might show up time to time, and then I could collect precise data of wild animals. I was very familiar with the hunting spots where people might set the traps, and it was easy for me to find and unsettle the

Since 2005, the Infrared Camera Trap Monitoring Technology was introduced to Anzihe Nature Reserve; there was a revolutionary development of patrolling, monitoring and researching work. My conservation knowledge accumulated in those years with the hunting experiences capacitated me to be in charge of this 10-year programme.

The first photo of Macaca Thibetana was taken by the camera set in Shaoyao Valley of Anzihe Nature Reserve. In this area, there was a big group of Macaca Thibetana. I used to come around to monitor



Fu Qiang was on the way to patrolling. © Anzihe Nature Reserve.

the living situation of them in the past years. I knew we could get many precious photos here, so I set the first infrared camera here. The upshot proved me right, as we got plenty good photos. Besides, WWF supported us 15 new-generations of infrared cameras which could take high isolation videos; since then we have the dynamic resources. From the videos, we saw how mom Macaca Thibetana fed the babies. And when the curious baby Macaca Thibetana checked on the cameras, the cautious mom' told' the baby to go away.

In another valley called Bailipin, I used found the tracks of wild panda. When I set a camera here, I believed that we could see the wild panda photo very soon, but for a quit long time, there was nothing in the camera. Till one day, I went to check the camera again, but it was gone. And the branches and leaves I used to disguise the camera were destroyed and thrown everywhere. "The camera was stolen." This was the first guess in my mind. But I saw the damaged camera and its

parts were all over the ground, and I realized that maybe something else did this. When we checked the SD card of camera back to office, we amazingly found many photos of a panda's face, teeth, and shoulder. It turned out that a wild panda passed by and was attracted by the click sound of camera, and played with this 'fragile toy'. We lost a camera, but got the photos of this panda. It was fair trade but still reminded me to disguise the camera better next time from the clever creatures in the woods.

The Infrared Camera Trap
Monitoring Programme provided
valuable photos and videos of wild
animals. Till 2012, we have about
7000 photos and more than 1000
clips of videos of wild animals,
such as Giant Panda, Takin, Forest
Mush Deer and so forth. Those
were important information for
making the conservation plan and
for the research work. Moreover,
the infrared camera could monitor
the intervention of human activity
on wild life. It was meaningful to
protect the habitats for wild life.

Till 2013, I worked in Anzihe Nature Reserve for 18 years. I almost covered every inch of the mountains. I knew exactly the right spots to see the certain animals. I could tell the time when the animals show up. If you believed you have seen all the magnificent beautify of

nature, I would tell you I have seen them all.

# BAMBOO PLANTATION IN ROAD 108 QINLING TUNNEL COR-RIDOR AREA

From late 2012, WWF and Guanyinshan nature reserve have begun to plan and organize bamboo plantation activities in the new year. This year, from early March to the end of April, more bamboos have been planted in another 20ha of area under the artificial forest in the National Road 108 Qinling Tunnel corridor area (as one of the most important panda corridors in Qinling giant panda conservation network) next to the northeast of the Guanyinshan Nature Reserve. This year, more than 40 people have been involved in this plantation work.

From 2006 till this year, nearly 150ha bamboos have been planted in this region. WWF hopes that by planting bamboos in this area can help to facilitate the habitat restoration progress in the region that used to be fragmented for a long time due to road and other large-scaled construction works.

On March 19th, shown in pictures below, a group of people were planting bamboos along 108 National Road, at northeast boundary of Guanyinshan nature reserve.



Cutting-off underwoods. © WWF/Hao Liang.



Digging hole for bamboo seedling. © WWF/Hao Liang.

# CONSERVATION EDUCATION CENTER ESTABLISHED IN SAN-JIANG STATION, WOLONG NATURE RESERVE



Liang Haitang, Head of WWF Chengdu Office, talked with the staff in Sanjiang Station, Wolong Nature Reserve. © WWF.

On March 29th 2013, Conservation Education Center was established in Sanjiang Station, Wolong Nature Reserve, where was an important panda habitat. This education center was around 120 sq. m. and the inside layout was supported by WWF. To show the biodiversity conservation work of reserve, educate the public on the bio-conservation knowledge and raise the awareness of them, this education center will play an

important role.

Inside of the center, there was a section telling the history of WWF in China since 1980s, when WWF was invited by Chinese government and carried out the very first panda programme in Pingwu county, Sichuan Province.

In the center, two camps – one was simple and crude and another one was new and well-functional showed to the visitors the development of field patrolling and monitoring work before and after 2003, especially the equipments for survey staff.

Besides, the infrared cameras were displayed to illustrate the new technology applied to the monitoring work.

Sanjiang Station will carry out serial conservation education activity in this center to the visitors in the soon future.

### AN OVERSEAS POWER FOR PANDAS

# Panda Parade

My name is India Jacob I'm 10 years old and I live in Tuahiwi. I love giant pandas and recently my Mum and I have been making cute little toy pandas and are selling them. \$10 of each panda sold will go to the WWF [World Wildlife Fund]. Hopefully that money will be used to buy protected land for the pandas to live safety!

So far I have sold 7 pandas but there are still lots more that still need a home for \$17.50 each.

So Far I have raised \$165

On March 12th, 2013, the National Tree Planting Day in China, Wang Yue and her classmates used the money donated from India Jacob to buy more than 200 clusters of bamboo, and planted them in Longxi-Hongkou Nature Reserve, where is one of wild pandas' hometowns.

Wang Yue studied in Hongkou Primary School in Dujiangyan City of Sichuan Province. She planted trees every year in the National Tree Planting Day. "However, this year was different" she said, "As I planted the bamboo for panda, and those bamboos were donated by my pen-friend, India Jacob from New Zealand."

"My name is India Jacob. I am 10 years old and I live in Tuahwihi. I love giant pandas and recently my mum and I have been making cut little panda toys and selling them out. \$10 of each panda sold will go to WWF (World Wild Fund for Nature). Hopefully that money will be used to protect giant panda."

This was a letter from India Jacobs, who donated NZ\$165 from selling

the panda toys to WWF and hoped protect the panda. And Wan Yue knew India by email. Wang Yue lived in Gaoyuan village, Sichuan Province. Gaoyuan Village was near Longxi-Hongkou Nature Reserve, where was the habitat of 8 wild pandas, and other wild animals,

like Golden Snob Monkey and Takin.

In 12 Mar 2013, Wang Yue planted the bamboos for India. The two lovely girls hoped the wild pandas would live healthily and happily in the wild.



Wang Yue's classmates planting bamboo for pandas. © WWF.

# BUILDING A BEAUTIFUL PANDA LANDSCAPE: 2013 QINLING YOUTH AMBASSADORS RECRUITMENT

As Chinese government has set its ambition and efforts to build itself to a beautiful country early this year, the concept of ecological civilization construction has been regarded as one of the most important government priorities in the new era. However, conservation and environment issues are critical in China. For panda and panda habitat conservations in Qinling, as well as for landscape and local biodiversity conservation, threatens and challenges are still there.

The recruitment of annually Qinling Youth Ambassadors was started in early 2013. In June, representatives from nature reserves and local communities will review information and project designs, from all the applicants, together with WWF and Northwest Agricultural and Forestry University. The final recruited ambassador list will be released in late June. Besides, group trainings and activities will also be organized before they go to the mountains.

WWF hopes that more and more college students and younger generation would join in social voluntary services and relevant activities, to support nature conservation and sustainable community development in rural areas; also, to learn to appreciate and caring for nature and environment in practice.

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### **ACKNOWLEDGMENTS**

Special thanks to WWF Netherlands, WWF-Switzerland, Fondazione Zegna and EU for their financial supports to the Qinling Project Phase III, WWF UK, WWF US, WWF Germany and WWF Sweden for their financial supports of Minshan Initiative, and WWF Netherlands, WWF UK, WWF US, WWF Germany, WWF Sweden, WWF Switzerland and WWF Canada for their supports of the Green Heart of China Programme. Sincere thanks to the Coca-Cola Company for WWF-TCCC Partnership, WWF Network and WWF-US Humanitarian Partnership Programme for making efforts to post-disaster reconstruction plans, and Carrefour for Sustainable Management and Development Project for Medicinal Plant Resources.



### Why we are here

To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.

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