



Pandas



YOUR FIELD REPORT
SPRING 2023



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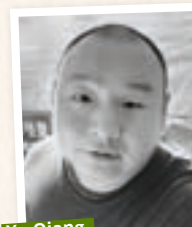


Once widespread, the giant
panda is now restricted to
around 33 isolated patches of
bamboo forest in six mountain
ranges in China's Sichuan,
Shaanxi and Gansu provinces



Hello!

Welcome to your latest giant panda update



Xu Qiang,
senior programme
manager, WWF-China

Since your last update,
we've been developing
a new project that will
restore vital habitat
and enable wild giant
pandas to roam more
widely. Known as
the Panda Migration
Station, the project
will transform the

black-and-white bears' migration routes
by connecting protected habitats. Working
with local partners in Dujiangyan, we've
identified priority areas for restoration,
which will help to reconnect their forests.
Our partners will also create water sources
and experimental artificial caves, and
monitor human activity along the corridors.
With your support, we've already created
several caves, providing much-needed
shelter for giant pandas. 欢呼

(This means 'hurrah'
in Mandarin!)

MEET THE ADOPTION TEAM

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FIELD NOTES

Our work is not only in the mountains and forests, but in the villages too

A FORCE FOR NATURE

A team of volunteers are blazing a trail for women in community-based conservation

To protect wild giant pandas, it's vital we look after the places where they live, and engage local communities in conservation efforts. In one protected area of Dujiangyan, near the Giant Panda National Park, a seven-strong team of women are helping us do just that. United by their shared passion for nature, these volunteers from communities around the park are keeping a watchful eye over the mountains and forests that pandas call home.

Trained and led by experienced rangers, the team diligently patrol the area. They watch out for illegal human activities – such as trespassing and overharvesting of medicinal plants and bamboo – and signs of forest fires, so they can be tackled

quickly. The team also help monitor the wildlife living in the area by identifying their tracks, and plant trees as part of our vital forest restoration work.

"When we were young, we didn't have many chances to see animals in the wild, but we were curious about the forest and the mountains and what lived there," says a member of the group, which is known as Gardenia. "Thanks to the Nature Education Centre in the Giant Panda National Park, we became interested in



The terrain is steep!

The team patrol an area close to the park that's protected by the community



The Gardenia team of volunteers and rangers



This panda was spotted in 108 National Road Qinling giant panda corridor

FLOWER POWER

In your summer 2022 update, we described our work to restore a wildlife corridor in Dujiangyan state-owned forest farm, which connects giant panda habitats in the Minshan landscape. With our partners at the University of the Chinese Academy of Sciences, we recently developed a new way to restore the area and build on our success. Introducing flowering plants to attract pollinators will help bring the forest back to life and attract more animals to the area. One plant we've been keen to introduce is an orchid species known as *Dendrobium candidum*. This plant is valuable for its use in Chinese herbal medicine, so we're hoping it will bring economic benefits to local communities and encourage them to get involved in the project.

understanding and taking part in local conservation efforts. When we heard a new volunteer patrol team was needed, we joined without hesitation."

Acting as the interface between the Giant Panda National Park and local people, the responsibilities of the volunteer team go beyond the park's boundaries. "Just as important as patrols is spreading awareness about conservation work among local communities, especially rural villages close to the park," she says. "We share our knowledge, encourage support for conservation, grow a sense of ownership of the park, and inspire more people to get involved. We want to be a good example to local children and for them to grow up learning to love nature."

The team are proud of their work – and it's paying off, as more young people have shown an interest in volunteering in the park. The team have also noticed local attitudes to conservation changing, slowly but surely. "It's encouraging that people want to work with us and recognise that we all need to live in harmony with wildlife."

With the help of dedicated volunteers like the Gardenia team – and your support – we can keep innovating and improving the habitat and make it a place where giant pandas and other rare species can thrive. Thank you.

Xu

MOVING STORY

Giant pandas may seem happy to just amble around their forest home, but they make a real effort to find their favourite bamboo food

The giant panda doesn't look like one of the more energetic members of the animal kingdom, so you might not expect it to cover a lot of ground. And to an extent you'd be right: pandas rarely move rapidly, or even far. For most of the time when they're not eating – and they spend up to 16 hours each day foraging and munching – they're largely resting or sleeping. Pandas don't need to chase prey, nor do they migrate over long distances to find water. However, these bears do travel – albeit more vertically than horizontally.

Changing conditions

In part, a giant panda's travels are dictated by climatic conditions. Today, the surviving individuals (about 1,864 of them, at the last count) are restricted to six isolated mountain ranges in south-central China, where they live in lush forests at altitudes of between 1,200m and 3,400m. In winter, snow frequently cloaks the higher reaches, and many pandas tend to descend to lower elevations for the coldest months.

This isn't primarily about comfort, though; with its dense, woolly fur, the giant panda is well equipped to cope with chilly conditions. Rather, it's about food.

Bamboo bears

Pandas are famously fond of bamboo – indeed, the quick-growing grass makes up around 99% of their diet. But the nutrition these bears obtain from bamboo is limited, with a couple of significant implications. First, such a diet doesn't enable pandas to build up sufficient fat reserves to hibernate; instead, they must continue to eat a lot – up to 15kg each day – and regularly, all year round. And second, they select the most nutritious parts of each bamboo plant to get the most out of each one.

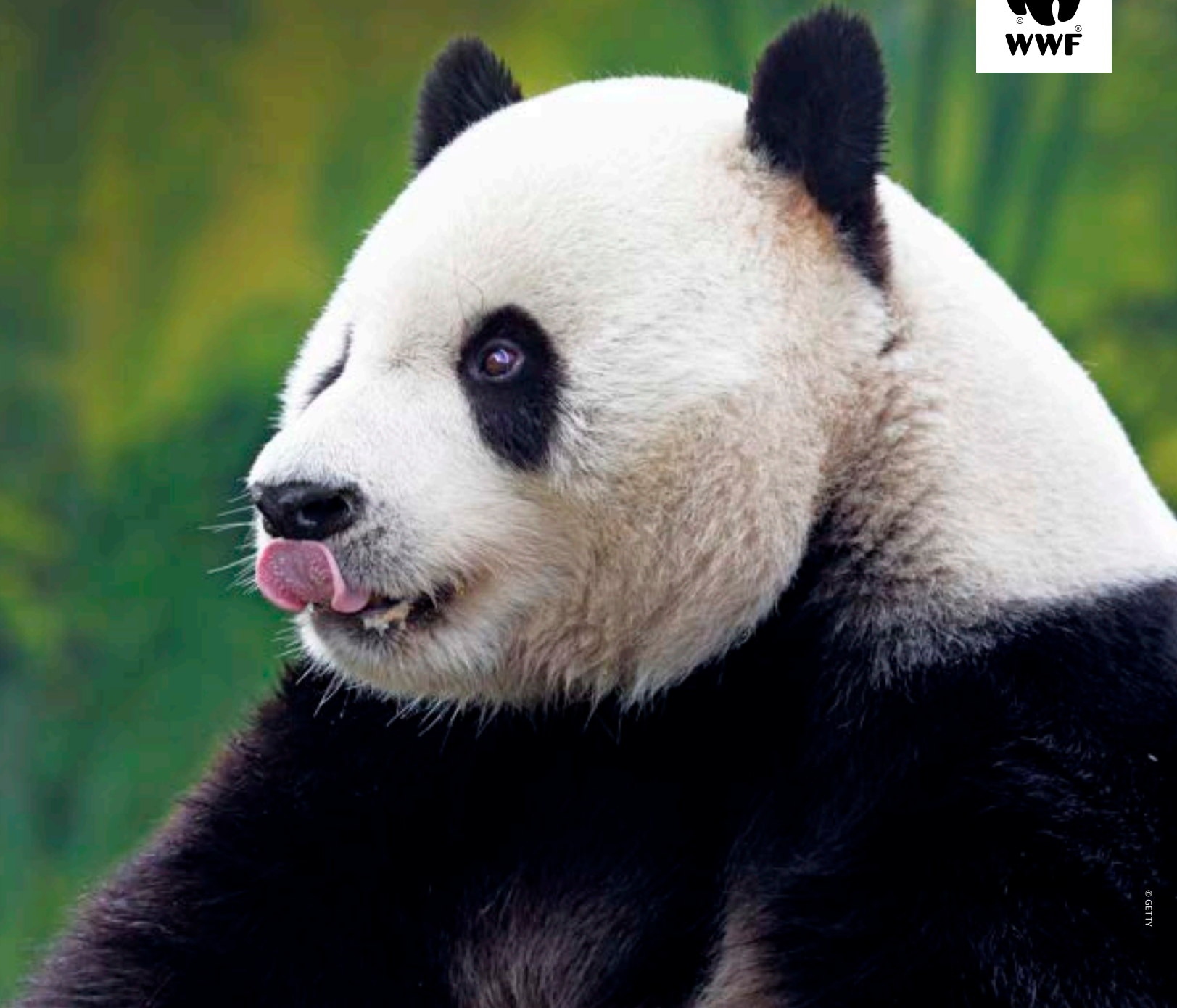
Eats shoots and leaves

The old punctuation joke is actually more accurate than you might imagine. Because though pandas do consume much of a bamboo plant – chomping leaves and stripping off the woody outer

Though the ascent can look somewhat awkward, pandas readily climb trees

CHASING SUSTENANCE

A study in Foping Nature Reserve has shown that giant pandas move quickly between their winter and summer ranges, up and down the mountains. The journey takes, on average, as few as two or three days. This is because there isn't much bamboo available in the areas in between. The study also showed that giant pandas prefer gentle inclines to steeper ones.

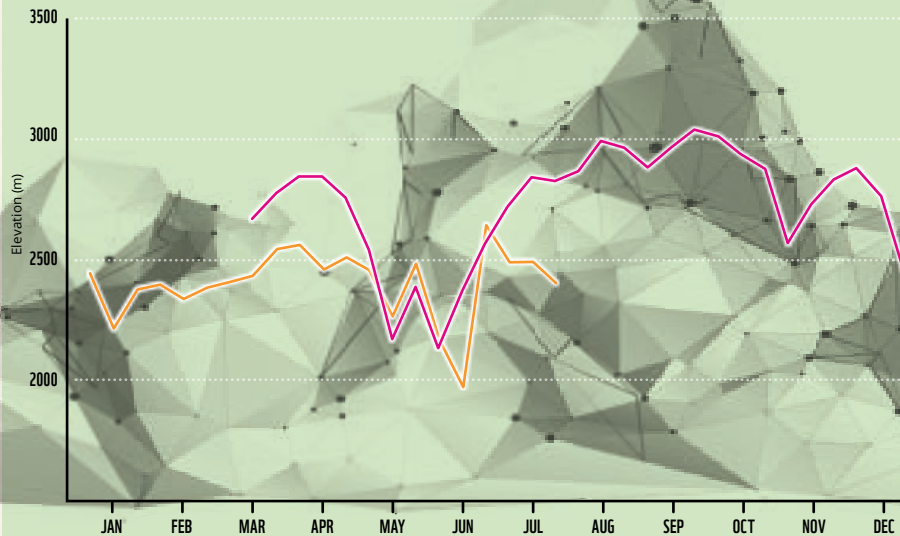


MOUNTAIN CLIMBERS

Pandas will live at different altitudes throughout the year, moving up and down mountainsides to be close to the youngest, tastiest bamboo

KEY

— Movement pattern 2011
— Movement pattern 2012



layers of each culm (stem) to get to the softer tissue inside – they prefer new shoots. While the cellulose plant cell walls are still developing, the young shoots are more easily digested and lower in fibre, with a good proportion of fats, sugars and other nutrients.

For this reason, many individuals focus their foraging on the very freshest shoots, gorging themselves when such tender growth is available. The timing of bamboo shooting varies by altitude, at least in some species, occurring later at higher elevations. And some pandas seem to take advantage of that, gradually

ascending as the new shoots appear over the course of each spring, chasing the choicest food up the mountainside in what's known as an elevational or altitudinal migration.

Flower threat

There's another, more fundamental reason why giant pandas sometimes need to travel – again linked to that dominant food. Pandas feed on some 25 species of bamboo, and suitable habitat must encompass at least two bamboo species – but not because they're fussy eaters or demand variety. It's because

bamboos are semelparous – each plant reproduces only once in its life. Crucially, that process is synchronous: all the plants of a species in a particular area flower at the same time then quickly die. This doesn't happen often – there are gaps of decades or even a century in some species – and it takes several years for enough fresh bamboo to grow to support giant pandas.

If more than one bamboo species is present, and only one flowers at a time,

DID YOU KNOW?

When a giant panda encounters a supply of really fresh bamboo shoots, it can devour up to 39kg in one day – over a quarter of its body weight.

the panda can switch to another species in its territory. If not, the bear must move to find another source of food, or risk starvation.

That's why the fragmentation of panda habitat is a big threat to the surviving population – and why WWF has supported work to restore wildlife corridors and build panda-friendly 'ecoduct' passageways to enable the bears to move between patches of habitat. ■

A study has found that pandas have been munching bamboo for six million years. A new fossil shows the species' ancestors also had a thumb-like sixth digit to grip their favourite food



FEELING THE HEAT

We're facing a climate emergency –
but it's not too late to reverse the damage

From floods and forest fires to record-breaking heatwaves, the impacts of climate change are already here – and they're only going

to get worse. Global temperatures are rising faster than at any point in human history. We need to do everything we possibly can to stop this, urgently, or the consequences will be even more devastating: food shortages; floods and storms becoming more severe and more frequent; tens of millions of people being forced from their homes because of heat, drought and rising sea levels; mass extinctions; natural wonders lost for ever.

We know the cause: burning fossil fuels such as oil, coal and gas releases carbon dioxide, which traps heat in the atmosphere. Destroying forests and other carbon-rich habitats adds to the problem.

But we know the solutions too. Cut greenhouse gas emissions drastically. Switch from fossil fuels to renewable energy sources such as wind and solar.

Use less energy, and use it more efficiently. Stop destroying natural ecosystems and start restoring them instead. With your support, we're calling on world leaders to make these changes.

The UK has promised to reduce its emissions and reach net zero by 2050, but we must act now. It's vital that UK governments take a lead on the big things – like ramping up renewables, insulating draughty homes, supporting climate-friendly farming, and improving transport systems so we rely less on cars. But changes in our own lifestyles can make a

difference too, from driving and flying less to eating a more plant-based diet.

Most of all, we need to treat climate change like the emergency it is – before it's too late.

**DO ONE
THING!**

Ditch the car
Transport is
the UK's biggest
source of
emissions. Walk,
scoot, cycle,
car-share or use
public transport
whenever you can.

Switching to clean energy is essential
to shift the world to a low-carbon
economy and stop pollution

**FIND OUT
MORE**

Download our My Footprint
app to find more ways to
help nature every day
www.org.uk/myfootprint



Find out
about the other
species you can help
with an adoption at
[wwf.org.uk/
adopt](http://wwf.org.uk/adopt)

JAGUARS

Thanks to our adopters, we've been supporting local communities in the Brazilian Amazon to find ways to coexist with jaguars. We brought local people together for a workshop to share ideas and tried-and-tested techniques to minimise attacks on livestock. Since the participants have followed the advice, they've reported no further conflicts with the big cats. Now they can help others by spreading the word.



ADOPTION ACTION

Thanks to adopters like you, we're protecting wildlife around the world. Here are some of the great things we've achieved together

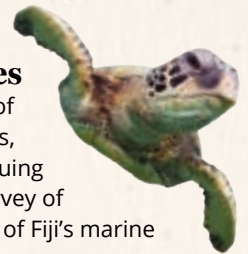
Rhinos

Thanks to our rhino adopters, we've helped build a new watch tower in Ruma National Park in western Kenya. The tower will enable rangers to see rhinos more easily in the park's thick vegetation and tall grass, and improve monitoring efforts to keep them safe. Rangers can also keep a lookout for any illegal or suspicious activity, and spot signs of bushfires as soon as they start, so that blazes can be tackled quickly.



Marine turtles

With the support of our turtle adopters, we've been continuing our three-year survey of the nesting habits of Fiji's marine turtles. Nesting surveys are an effective way to gauge the health of the population, and by counting the nests and eggs we find, and recording their locations and the condition of their nesting beaches, we will be better able to answer vital questions about these ancient mariners – and the threats they



Polar bears

Our adopters have been helping keep polar bears and people safe in Canada. In the town of Churchill, polar bears that get dangerously close to homes in their search for food are taken to a holding facility where they stay until the sea ice freezes and they can be safely released. Thanks to satellite ear tags funded by adopters, we're now able to track where relocated bears go so we can better help them.



Mountain gorillas

We've been celebrating some of the newest arrivals in Volcanoes National Park at Kwigira Izina – Rwanda's annual gorilla-naming ceremony. Twenty mountain gorillas have been born in the park since the last ceremony. New births are always a cause for celebration, but they're particularly precious among an endangered population. This growth is possible thanks to adopters like you.





IN YOUR SUMMER

Field report

*Why pandas
are solitary*



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FSC logo

As well as helping to safeguard pandas, you support our other vital work to help protect our beautiful planet and its wildlife. Thank you.

All information correct at time of printing (February 2023)