

THREE PARALLEL RIVERS OF YUNNAN | The Mekong, the Yangtze and the Salween

## At the eastern end of the Himalayas, a vast protected area is a museum of biodiversity

nrawling across a huge expanse of Yunnan Province in southern China, the Three Parallel Rivers of Yunnan Protected Areas make up one of Unesco's largest and most diverse World Heritage sites. Fifteen nature reserves and scenic areas comprise the area, which embraces 17,000 square kilometers, or just over 6,500 square miles, of wilderness along Yunnan's border with Myanmar and Tibet.

The park takes its name from the three great Asian rivers — the Mekong, the Yangtze and the Salween that have their headwaters in this region. For nearly 300 kilometers (186 miles) they flow parallel to one another before curling off in diverse directions for their long journeys to the Indian and Pacific oceans. The Irrawaddy River is also born in these highlands and for a brief stretch runs alongside the other three.

Fed by the glaciers and snowfields of this extreme eastern end of the Himalayas, these rivers and their tributaries cut a sinuous path across the landscape, creating gorges of up to 3,000 meters (9,843 feet) — twice as deep as Arizona's Grand Canyon and every bit as spectacular.

Three of the globe's great geographical zones converge in these mountains and valleys — East Asia, Southeast Asia and the Tibetan Plateau — one of the few places on earth where this remarkable overlap takes place. As a result, the Three Parallel Rivers area is one of the most diverse places on the entire planet.

The montage of topography and climate nurtures an array of life forms. Researchers estimate the area harbors around a quarter of the world's animal species, including a number of endangered creatures. Among its myriad mammal species are the clouded and snow leopard, the Asian black bear, the red or lesser panda, the capped leaf monkey and the takin, a rare goat-antelope found only in the eastern Himalayas

Flora is equally profuse: more than 6,000 plant types are known to exist within the site, around a tenth of them endemic to northwestern Yunnan. The vegetation zones range from alpine meadows and coniferous forests to

arid savannah shrubland and deciduous woodland Like the local animals, many of the plants are rare

and endangered. Of particular note are the Yunnan

yew tree and 20 other relict species that survived the Pleistocene ice ages. The site also contains more than 500 different medicinal plants and more than 200 species of timber trees.

The site is divided into eight geographical clusters or

and local authorities who work in conjunction with Unesco and international conservation groups. The best known of these is the Baima-Meili Xueshan Reserve in the far north, along the border with Tibet.

subunits administered by a variety of national, provincial

More than 20 of the Xueshan, or "snow mountains," boast permanent snow cover, and six soar higher than 6,000 meters. Towering above all is 6,740-meter Kawagarbo, the highest mountain in Yunnan and a place for pilgrimage for Tibetan Buddhists, for whom it is the home of the eponymous warrior god.

The rambling Gaoligong Mountain National Nature Reserve is the largest of the subunits and the most remote. The Nature Conservancy calls the park a "veritable museum of biodiversity" because of its many plant and animal species. Around 85 percent of Gaoligong is

covered in forest, much of it old-growth woodland that has never been logged. Strung out along the border with Myanmar, the reserve is also known for its volcanoes, hot springs and other geothermal features.

Many of the smaller subunits boast a particular geographical or biological phenomenon. For instance, the endangered Yunnan snub-faced monkey is the focus of Yunlingshan Nature Reserve. Qianhushan (Thousand Lake Mountain) Scenic Area in the province's aptly named Shangri-La County protects a fragile highland saturated with countless alpine lakes.

Haba Xueshan Nature Reserve, easternmost of the subunits, contains another lofty peak. But its main claim to fame is the fabulous Tiger Leaping Gorge, one of the world's deepest canyons. Churning against bare stone over millions of years, the Yangtze River has shaped a canyon with 2,000-meter walls that close to within 25 meters at their narrowest point. The ferocity of the rapids makes the river unnavigable, but the gorge is a popular trekking spot.

## Marine World Heritage app

**The World Heritage Center launched** an iPhone application in celebration of World Oceans Day on June 8. The app features the 45 marine sites on the World Heritage List, with videos of these exceptional places as well as descriptive information about them and about the decisions the World Heritage Centre has taken on the status of their conservation. Of the 6,000 protected marine areas around the world, only 45 are listed as World Heritage, the highest internationally recognized status for conservation. Go to http://tinyurl.com/whc-app to download the free app from iTunes

## From challenge to collaboration

A challenge by an ambitious French watchmaker, Edmond Jaeger, to the venerable Swiss manufacture LeCoultre at the beginning of the 20th century initiated one of the most creative partnerships in the history of timepieces.

Jaeger had an innovative design for ultrathin timepieces, but he didn't have capability to produce them in his workshop. So he challenged the Swiss watch industry in 1903 to produce what he had designed.

Jacques-David LeCoultre, who had taken over the business founded by his grandfather Antoine in 1833, immediately rose to the challenge issued by Jaeger. The two men met personally and signed an agreement that same year; together they went on to create several of the thinnest minute repeaters, chronographs and double complications ever produced.

Their greatest achievement in watch thinness came in 1907 when they introduced the LeCoultre 145

Calibre. Only 1.38 millimeters thick - just over five-hundredths of an inch — it was the flattest mechanis of its time. This record-breaking chronometer remained in production for more than half a century (until the 1960s) and some 400 copies were ultimately produced.

**Current examples of** extraordinary watchmaking reconfirm this tradition of thinness and advanced technology. The Calibre Jaeger-LeCoultre 849 measures a mere 1.85 millimeters in thickness, making it one of the thinnest watch movements in the world. Its mechanical mechanism is assembled entirely by hand.

The Master Ultra-Thin Moon 39 sparkles not only for its minimal dimensions (4.9 millimeters in thickness) but for its automatic movement made of 22-karat gold and its crystal case back in sapphire. As the name suggests, a moon-phase display adorns the dial.

C.F.

**PEOPLE OF YUNNAN |** Indigenous culture

## The diverse human element of this noteworthy biosystem

with the Three Parallel Rivers of Yunnan Protected Areas in southern China, home to countless plants and animals — and around a quarter million human inhabitants.

"Similar to many other countries in Asia, nature and culture are seen as inseparable in China," declared the advisory body that evaluated the site's nomination for World Heritage status in 2003. "This is especially the case in the nominated area." This remains the case a decade later. Even before World Heritage designation, conservationists realized they would need to partner with local residents in order to safeguard the area's natural wonders.

People have occupied northern Yunnan Province for thousands of years and are as much a part of the local fabric as the site's abundant flora and fauna. Among them are more than a dozen minorities, including some of China's smallest ethnic groups.

With the Tibetan Plateau dominating the northern end of the region, ethnic Tibetans are one of the largest minority groups. Jagged, snow-capped Kawagarbo peak in

n a nation with 1.3 billion people, it comes the Baima-Meili Xueshan reserve has long preserve the cultures and traditions of the as no surprise that even wilderness been sacred to Tibetan Buddhists. Around resident ethnic groups. areas are populated. Such is the case 20,000 faithful each year make a pilgrimage to the hulking mountain, considered to be the home of the Tibetan warrior god of the same name.

Among the other minority peoples who dwell within the site boundaries are Lisu. Nu. Dulong, Bai, Pumi and Naxi. Time-honored lifestyles endure among many of them traditional clothing, housing and farming methods, as well as ancient rites and religious practices.

"The linkage of their rich cultures to the land is evident in many ways — through their religion and their mythology, art, dance, music, poetry and songs," the advisory body's evaluation stated. "The local status of the Meili Snow Mountain as a sacred area, off-limits to mountaineers, is one reflection of their reverence for wild nature and the vigor of the local culture."

This organic blend of nature and humanity is an integral part of the Three Parallel Rivers site. The management plan for the World Heritage area urges government agencies responsible for the 15 areas that make up the site to create action plans to

At the same time, residents are drafted into efforts to preserve and protect the site. Steep terrain and high altitude severely limit human activities in much of the protected areas. Most people live in low-lying areas that are easier to access and cultivate. But authorities estimate that some 36,000 continue to inhabit core areas with outstanding geological or biological features.

As is the case with heritage areas and national parks around the globe, some residents are being asked to relocate, especially those living in high-altitude areas with vulnerable ecosystems. Even though most resource use is sustainable at the present time, authorities are trying to stem forestry, grazing and other potentially harmful activities in the core zones.

Despite its isolation and low population, the site still has its threats. Among the major

concerns are illegal logging, poaching of rare or endangered animals, overharvesting of medicinal plants, overgrazing and mining And these perils will continue to evolve. "The current array of threats to biodiversity in the region is changing rapidly due to dramatic socioeconomic change in China during the past two decades," said the Critical Ecosystem Partnership Fund in its report on the Three Parallel Rivers region.

Tourism is undeveloped at the present time. While core areas will remain off-limits to tourists to preserve these fragile habitats, outlying areas and buffer zones will continue to be developed for their tourism potential with the addition of more hotels, better roads and activities like trekking, horseback riding, caving and boat excursions.

Authorities would also like to tap the tourism potential of the region's ethnic villages, perhaps in a similar fashion to the hilltribe areas of northern Thailand.

Tides of time: Three Parallel Rivers of Yunnan was produced by the IHT Creative Solutions department and did not involve the newspaper's reporting or editorial departments. It is the 35th in a series on Unesco's World Heritage marine sites. Text by CLAUDIA FLISI and JOSEPH R. YOGERST. For information on the IHT Creative Solutions program: www.nytimesglobal.com





THERE ARE STORIES THAT DESERVE TO BE CAPTURED FOREVER.

Created in 1931 for polo players, the Reverso is one of the rare cult watches in horological history. Its second face that may be personalised will enable you to choose exactly the moment you wish to remember forever. What will yours be? Let our engraving, enamelling and gemsetting artists immortalise your legend. A Reverso just for you.

GRANDE REVERSO ULTRA THIN TRIBUTE TO 1931. Jaeger-LeCoultre Calibre 822.

YOU DESERVE A REAL WATCH.

www.jaeger-lecoultre.com

