

A model of the alpine skiing area displayed during Beijing's bid to host the 2022 Olympic Winter Games.

Chinese biologists lead Olympics outcry

Proposed alpine skiing area lies within nature reserve.

BY DAVID CYRANOSKI

elebrations of Beijing's success in its bid to host the 2022 Olympic Winter Games have been tempered by protests from young biologists over the proposed alpine ski site. They say it falls within a protected national nature reserve that contains many rare species, including Beijing's only Shanxi orchids (Cypripedium shanxiense).

More importantly, say other biologists, the proposed site would violate environmental protection laws touted by the government, and create a precedent that would hamper already fraught efforts to conserve other, more significant sites.

Local officials have since said that they will redraw the lines that delineate the reserve — but this has left the protesters unsatisfied. Meanwhile, their online posts on the subject, to the Chinese social media website Weibo, are no longer visible; the protesters say they have been blocked.

On 31 July, the International Olympic Committee, based in Lausanne, Switzerland, announced that Beijing would host the 2022 Winter Olympics, beating its only rival, Almaty in Kazakhastan, by 44 votes to 40. But nature enthusiasts quickly noted that the proposed alpine skiing routes fall within the core area of the 4,600-hectare Songshan National Nature Reserve. On 1 August, Wang Xi, who recently received his PhD in plant biology and works at the Chinese Academy of Sciences in Shanghai, overlaid maps from the International Olympic Committee's evaluation report with those from the reserve's website and posted the result on his Weibo account: both the start and end of the alpine runs fall within the reserve, he found (see 'Olympic overlap').

Xi told Nature's news team that his main motivation was to spread news of the possible ecological impact on plants there, including on three orchid species that are classified at the highest protection level under Beijing's conservation system. "It's a chance for the government to connect with the people and talk to each other to solve this problem," he says. "I am not against the Olympic Games, but they should be carried out in an environmentally friendly way."

WEIBO CLICKS

Xi's post was clicked some 240,000 times and forwarded more than 1,000 times, but within two days he found that it no longer appeared online. Word spread anyway. Yun Ji, a 28-yearold entomologist in Beijing who did not want his affiliation mentioned, had copied Xi's maps. He added information on and pictures of the various plants found in the reserve that are on a list of the rarest and most rigorously protected of Beijing's plants, along with photos of birds whose habitat, he says, could also be destroyed. His Weibo post is now inaccessible from the site — he claims it disappeared within four hours — but while it was online he says that it was forwarded 3,000 times, and one of those reposts was forwarded an additional 16,000 times.

Neither the Chinese Olympic Committee nor the Beijing government has released official statements responding to the allegations in the posts; in the International Olympic Committee evaluation report, the skiing area is described as being "adjacent to" the reserve. But on 7 August, the deputy mayor of Yanqing, the county in Beijing that has jurisdiction over the Songshan National Nature Reserve, announced that the borders of the reserve would be "adjusted" to take in land to the northeast of the current boundaries, and that some of the original reserve will be taken "to provide the necessary space for local sustainable development and to promote interaction between ecological protection and economic society".

The details are not yet clear, but the proposed reserve is 31% larger than the original and does not overlap with the ski slopes, according to interviews with the deputy mayor published

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by Chinese media outlets. The mayor's office deferred queries from Nature's news team to the bid committee, but the team did not receive a response from that committee nor from

the China Olympic Committee. The International Olympic Committee has also not replied to queries from Nature's news team on how it handles applications that have inconsistencies, and whether conflict with a nature reserve would have affected its decision.

According to 2013 Chinese government regulations, those who wish to change nature-reserve boundaries must submit an application that includes public comment, an ecological assessment and four other documents. Xi and Ji say that they can find no evidence that this happened.

Lei Gu, a postdoctoral researcher in evolution

and conservation biology at Peking University in Beijing, says that Songshan is not that important in terms of biodiversity. The bigger problem, he says, is that a government that has been increasingly issuing statements and regulations that emphasize its commitment to

environmental sustainability and conservation seems to be backing away from its promises. In May, for example, China's environment ministry released a notice, signed by ten government agencies, that stated that any development at odds with a reserve's function is "strictly forbidden". Gu and Xi both worry that failure of the strict policies in Beijing would send a broader signal to local governments. If Beijing violates Songshan's reserve, "it will be easier for local governments to give construction projects higher priority than conservation issues", says Gu, whose Weibo posts on the subject are no longer accessible. "The real impact", he says, would be "the breaking of Chinese laws and policies on nature reserves".

Xi says that a better site for the alpine skiing event would be Zhangjiakou, a city in neighbouring Hebei province, which will also host some Winter Olympic events. Zhangjiakou has mountains that are already developed and would suffer no environmental loss, he says.

CLARIFICATION

500 m

The News story 'Stanene makes its debut' (*Nature* **524**, 18; 2015) should have made it clear that the stanene was made by experimentalists at Shanghai Jiao Tong University.