scientific and medical advice. That is what we are looking for from the work of this review group."

Barroso told EU leaders that food price rises had added "a new dimension" to the public debate about GM crops. He admitted people were worried about GM organisms in food and farming, but he said the EU was probably one of the biggest importers of GM feed as its livestock industry was highly dependent on imported plant proteins.

The current aim of GM crops is to produce a better yield and profit for farmers and the crops' developers. But a report earlier this year, carried out by researchers at the University of Kansas, noted that farmers had reported yields lower than optimum from GM soya compared with conventional soya. Barney Gordon, of the university's department of agronomy, began the study because of anecdotal reports of farmers achieving lower yields with the GM variety. Reporting in the journal *Better Crops*, he found a 10 per cent lower yield with the GM variety compared with a conventional variety. He was able to improve the yield of the GM crop with the addition of manganese, but the yield still did not exceed the conventional crop.

While some American growers may be concerned about yields from their GM soya, a survey of Spanish farmers growing the only commercial GM crop in Europe, GM maize, were largely very happy with the variety. They found that the variety produced higher yields and earned $100 per hectare more than conventional maize varieties.

And, while US cotton growers have largely been impressed with the performance of GM cotton, which contains an insecticide that kills the larvae of one of the main pests of the plants, reports from India suggest that there some growers of the variety find that it needs pesticide treatment against secondary pests and delivers lower yields, raising questions about its value in this environment.

A major new study, launched last month by Britain's Royal Society, looking at how science can help secure the world's food supply may provide welcome new evidence to the increasingly divisive debate over GM crops.

# Common interest

One of the West's frontline bases during the Cold War has been turned into an innovative conservation project. **Nigel Williams** reports.

The Cold War is something now forgotten in most people's memories. An inkling of the past may have emerged in the recent conflict in Georgia and growing concerns about the relationship between Russia and the West, but one Cold War site has moved on to different days.

Greenham Common in Berkshire, England was used by both the Americans and the British during World War II and during the Cold War. It was also home to nuclear missiles and became the focus of major demonstration. Marches and the women's peace camps held in the 1980s to stop nuclear weapons being kept at this site provided headline news. Tens of thousands of protestors formed a 14-mile human chain to make the point.

Eventually, at the end of the Cold War, the missiles left the camp in 1991. In one of the most populous regions of southern England, an area of former heathland began to regenerate as people began to consider what to do with the redundant airbase.

Without any intervention, the grass-sided airstrip began to turn gradually back into the heathland that existed at the site before the base was built. Animals and plants that once occupied the site began to return.

In 1997 a newly formed Greenham Common Trust bought the airbase, immediately selling the open common land to the local authority for £1. Over the next few years the fences came down, 1.25 million tonnes of concrete and gravel were removed, new pools and slopes were landscaped, and grazing animals were once again allowed to feed freely on the wide open expanse of heathland. Local people found the former airbase a place of escape from neighbouring towns.

**"Landscape-scale conservation is bigger and broader than the traditional conservation management of small, fragmented pockets"**

Greenham Common now is the largest area of heathland in the region and supports several nationally scarce species, such as the Dartford warbler, adder, common lizard, small red damselfly, hobby, tree pipit and stonechat.

But this local conservation and restoration success, is now becoming part of a larger, ambitious


**Protest:** Women opposed to the location of nuclear weapons at the Greenham Common airbase in southern England created a high-profile protest. (Picture: Homer Sykes/Alamy.)

**Thriving:** Closure of the Greenham Common base has let to an innovative conservation project that has proved home to rare species such as the Dartford warbler. (Picture: Mike Lane/Alamy.)

conservation project for the benefit of both wildlife and local people. Awareness is growing that, in order to best protect wildlife in heavily populated areas, the creation of links between nature reserves offers the greatest chance of helping species thrive. Such projects will form the basis of new plans elsewhere to better protect wildlife in challenging environments.

The West Berkshire Living Landscape has been conceived by the local wildlife trust. The plan is to expand the range of natural species in the area to increase the numbers within individual species. The aim is to give species the best possible chance to adapt to and survive the pressures of human development and the uncertainties of climate change.

The heathland at Greenham is on top of a flat gravel plateau running from west to east. It is surrounded by wooded escarpments, with alder-lined gullies, running down to wetland river valleys. But species numbers have dwindled.

A number of species once common in the area are now threatened or gone. "If we can give them enough space and the right conditions, we could see these species rise once again to the kind of numbers that will give them a chance to cope with change and adversity," says Geoff Findlay, environment councillor for the district.

In the last 200 years, the area has been dramatically changed by the canal, the railway, farming practices, military use and mineral extraction. It also has a wealth of history, as does much of Britain, from social and military interest to ancient archaeology and geology. And the council is keen to encourage people to the site and expand it. The council hopes over the next 30 years to extend this 'living landscape' by at least 400 hectares.

"Landscape-scale conservation is bigger and broader than traditional conservation management of small, fragmented pockets of wildlife sites," says Philippa Lyons, chief executive of the local wildlife trust.

"People have shaped the landscape in the past, and are now an important part in securing the future of wildlife in the area."

## Q & A

# Liqun Luo

*Liqun Luo is a professor of biology at Stanford University, and an investigator of the Howard Hughes Medical Institute. He grew up in Shanghai, China, and earned his bachelor's degree in molecular biology from the University of Science and Technology of China. During his Ph.D. study at Brandeis University under the guidance of Kalpana White, he identified and analyzed the function of the* Drosophila *homolog of human amyloid precursor protein associated with Alzheimer disease. He then moved to the University of California, San Francisco for his postdoctoral training with Yuh-Nung Jan and Lily Jan, where he initiated the study of Rho GTPases in neuronal morphogenesis in flies and mice. He started his own lab at Stanford towards the end of 1996. Together with his postdoctoral fellows and graduate students, he has developed mosaic marking systems in flies and mice, and used these genetic tools to study how signals are transduced from cell surface receptors to the cytoskeleton at neuronal growth cones, how neuronal processes are pruned, and how neural circuits are organized in the adult and assembled during development.*

***What turned you on to science in the first place?*** It was quite accidental. I grew up during the Cultural Revolution in China, when there was essentially no scientific research to speak of. My childhood dream was to become a bus driver, and in preparation for this I studied the Shanghai map and learned to recite all the 90+ bus routes. The Cultural Revolution was over when I was 10, and there was an urgent desire in China to compensate for the lost years and to foster a 'Spring of Science'. Like many kids of a similar age in those days, I was inspired by a beautiful story in the national newspaper about a mathematician who, ignoring all environmental noises, kept working on mathematics, and took a major step towards solving the Goldbach Conjecture. I started with a fascination with mathematics, which turned to physics, and finally to biology in the middle of my college years. The rationale then was that physics was