China syndrome

ALTHOUGH inhabited by less than five percent of the world's population, the United States consumes some third or more of the world's resources. But China, with its booming economy and huge population, is fast catching up.

China already accounts for more grain and red meat, uses more fertiliser, produces more steel and burns more coal than the United States, and its emissions of carbon dioxide – already a tenth of the world total – are growing far more rapidly.

China's economy has grown by 10 to 14 percent a year for the last four years, and is likely to overtake that of the United States as the world's largest by 2010 if the growth rate continues.

Since China has nearly five times as many people as the US, its per capita demands are still far less. But even on a per capita basis, China is closing the gap in many products such as pork consumption. If each Chinese were to consume as much beef as the 45 kilograms a year eaten by Americans, it would take 343 million tonnes of grain – the entire US harvest – to feed the cattle to make up the difference.

As its population of 1.2 billion moves into modern houses, buys cars, refrigerators and televisions, and shifts to a more meat-based diet, the entire world will feel the effects.

The bottom line is that, with its vast population, China will not be able to follow for long any of the development paths taken to date by other countries.

Source: Worldwatch Institute

Success in the Seychelles

ENDEMIC ISLAND species do not provide many success stories, but in the Seychelles, east of Tanzania in the Indian Ocean, at least one endangered bird – the magpie-robin – has recovered to record high numbers.

In 1965 only 14 magpierobins remained – all on the



Like all Seychelles landbirds, the endangered magpierobin Copsychus seychellarum is not found anywhere else. The birds mainly seek their food in open leaf litter, but regenerating natural vegetation on their Fregate Island home was found to be depriving them of foraging sites. The provision of suitable areas for foraging has been important in helping magpie-robin numbers to recover.

small island of Fregate. Despite increased trapping of feral cats, there was still only a precarious population of 17 birds in 1990.

Working with New Zealand's Don Merton, of black robin fame, wildlife managers started a programme of supplementary feeding and habitat management to provide suitable foraging sites for the magpierobins. Breeding success improved immediately and numbers rose to over 40 (see Forest & Bird May 1994).

Being restricted to just one island, however, the species was extremely vulnerable. After two unsuccessful reintroduction attempts, small populations have now been established on Cousin – owned and managed as a nature reserve by BirdLife International – and Cousine Islands.

With three separate populations and a total of 60 birds, the future is more encouraging. However the magpie-robin is not yet out of trouble, as a population of Norway rats has very recently been discovered on Fregate Island – a timely reminder of the importance of ensuring more than one population of any endangered species.

Another interesting New Zealand connection with the Seychelles has recently come to light. A sooty tern with a New Zealand band was discovered earlier this year breeding on Aride Island.

Most seabirds return to their colony of birth to breed, so this was unusual. The tern had originally been banded in 1961 in the Kermadecs, over 13,000 kilometres from Aride. Whilst the distance is impressive, it would only be a small fraction of the total kilometres the bird has travelled in its 35 years – in itself a remarkably long life and the maximum recorded for any tern species.

Richard Cuthbert

Alien travels

THE WORLD'S largest nongovernment conservation gathering has been warned that the global movement of invasive species into new habitats is a multi-billion dollar problem that is not being directly or adequately addressed by international agreement.

A report from the Species Survival Commission of the Swiss-based World Conservation Union (IUCN) to the IUCN's congress in October called on governments and trade organisations to put numbers on the benefits and costs of species moving into new habitats as a result of human activity. The report argued that the spread of such species is on a par with habitat loss as the main reason for the decline of biological diversity.

"If we don't get a handle on this problem soon we will lose huge tracts of biodiversity," said the commission's Wendy Strahm. "Only the top competitive species in each area will survive. There is no sense in saving areas for conservation if we then allow them to be invaded by alien species."

Among the exotic invasions listed by the commission were:

- ▶ zebra mussels carried in ballast water from the Baltic Sea a few years ago which have invaded the Great Lakes bordering the United States and Canada. They are now spreading into inland lake systems where they kill clams, reduce food available for fish, and clog electric turbines and water pipes. No control is known.
- an exotic virus introduced into Australia through the thriving international trade in ornamental fish that is causing a rapid decline in frog populations in Queensland.
- water hyacinth introduced to China from South America and encouraged as an ornamental plant, livestock feed and an absorbent of heavy metal pollution. As a weed of lake systems it has caused local extinctions of several native plant and