



The World Around Us



GREAT WHITE SHARK MIGRATION



"Foreign Correspondent"
Michael Ludwig reports on some strange goings on in the natural world.

Scientists, trying to conserve great white sharks (*Carcharodon carcharias*), are using space technology to help them learn more about these killers. Attaching satellite based tracking devices to an animal that grows to be more than seven metres long, weighs over 3200 kilograms and eats people is a challenge but several great white sharks have been successfully tagged (without injury to scientists or sharks!). One of the sharks, nicknamed Nicole, stunned scientists by crossing the Indian Ocean from South Africa to Australia and then returning home in just nine months! Up until Nicole performed that behaviour it was thought that great white sharks kept to the coastal regions. But this new information is troubling. Nicole's journey to Australia was direct but the stay short. As food is plentiful in South African waters, the scientists think that she may have made the journey for mating reasons. If the journey is a regular one for these sharks, the scientists are worried that the already vulnerable great white shark population may be at greater risk than previously thought because they can be captured on both coasts as well as by long-line fishermen in-between. However, with each passing day of satellite recording, knowledge and management options regarding the species increase. Safe travels, Nicole.

GOOD NEWS FOR FORESTS

After hundreds of years of decline, forests appear to be making a comeback. Forestry scientists have discovered that of the world's 50 most wooded nations, more than half are showing an increase in the number of trees per hectare (density), with the greatest recoveries in China and the US. Although some countries are still destroying their forests faster than any recovery can occur (Indonesia and Brazil) the overall increase in trees is encouraging. Because trees produce oxygen and absorb carbon dioxide (CO₂) during the day, they are collecting one of the main gases causing global climate change. All the more reason to encourage people to plant an extra tree or two.



"One-in-1000-years drought"

While Ireland is enjoying a typical wet winter, Australia is in the middle of another blistering hot and dry summer. Lack of rain, particularly during the period when it is expected (June and July, down under) and, often, most needed, is another sign that our planet's weather patterns may be changing from those we have grown accustomed to seeing.

Many areas of Australia are suffering from a severe drought that began in 2002 which scientists are calling a "one-in-1,000-years drought". In the historical record dating from 1900, 2006 was the driest August to October period when averaged across Southern Australia. In 2005 there were rains but they did not fall evenly across the country. Western Australia received less than 40 percent of its average rainfall in July. The drought is affecting drinking water supplies and having an affect on crops, also. The largest drinking water reservoir supplying Australia's capital, Sydney, is only 40 percent full and many surrounding towns have even less. More than half of Australia's farmland is experiencing drought. Water supplies are so strained that the government held an emergency summit to discuss ways to help humans and farms and prepare for the range fires that have swept across the plains in the last few years. And, with limited water supplies, how will the fires be controlled?

MISSING GREY WHALES

Earthwatch Institute, Maynard, MA, USA, 20 October 2006 —

Finding one thirty-ton animal in the vast North Pacific may be as hard as finding a needle in a haystack. But when the entire estimated population of 17,000 grey whales is hard to find, it is cause for concern. Researchers reported very few sightings in the grey whales' traditional summer feeding grounds last season. The grey whale (*Eschrichtius robustus*) usually spend summers feeding in the plankton-rich waters of the North Pacific, along the west coast of Canada, migrating 9,500 to 11,500 kilometres each year to the warm wintering lagoons off Baja California, where they breed and have their calves. It is one of the longest migrations known to man. Scientists, however, are concerned because for the second summer in a row, very few sightings of members of the population have been reported on the summer feeding grounds. They hope that the whales have found new feeding grounds, as the usual feeding grounds have suffered from the effects of global climate change over the last ten years. But scientists feel the whales will have had to look hard to find good feeding areas and the researchers will be studying the grey whales of the eastern Pacific Ocean closely for weight loss when they return to Baja California this winter.

