

Friends of CREEC Association

Annual General Meeting

At CREEC

7pm Thursday 16 August

Members and representatives of member groups invited

Committee and Board Member positions available

Did you know?

The productivity of the Amazon basin depends on nearly 50 million tonnes of dust, blown west over the Atlantic each year, from the Bodélé depression north-east of Lake Chad in Africa. The dust supplies more than half of the Amazon's total annual mineral supply.

Units of measure

Why do we refer to volumes of water in terms of Olympic swimming pools or Sydney Harbours? And equate the amount of carbon dioxide sequestered in trees or emitted from power stations, with the number of cars taken off or added to our roads?



Please recycle this newsletter by passing it to friends or neighbours.

This newsletter is produced and distributed by volunteers. We believe in its value in communicating information to members of our community who are interested in the environment and the work of CREEC. Contributions welcome

We thank the Caboolture Shire Council for their assistance.



Caboolture Region
Environmental
Education Centre

**This Newsletter is
on the web at
www.creec.org.au**

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**Friends of CREEC
Annual General
Meeting**

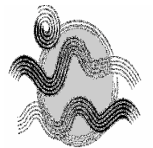
Friends of CREEC Assn Inc

150 Rowley Road

BURPENGARY QLD 4005

Phone : 3888 8751 Fax : 3888 3211

Email : marshw@caboolture.qld.gov.au



caboolture shire

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Award 2005

August 2007

Tree Planting Day Success

The tree-planting morning in the park was a complete success – perhaps too much so. An army of eager families arrived before the starting time and signed on – over 200 of them. Congratulations to the Deception Bay and Narangba guides for their organisation, sausage sizzle, drinks and good cheer.

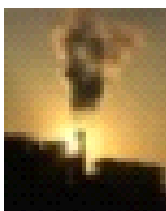
Caboolture Council had organised the trees and prepared the site with mulch spread and holes already dug, with the water truck to follow. 1000 trees from the CREEC nursery were planted, protected with plastic sleeves and bamboo stakes (courtesy Jonkers) in about an hour. No injuries, no complaints, something for all ages.

The most memorable part of the morning was the spirit of those who attended. All were anxious to do something for the environment, for the future, to take part in a community event of value to everybody in the short and longer term. An opportunity for parents to work with their children, and children to learn how to follow instructions, get the sequence right, start at the beginning and finish the job properly. There are fewer opportunities to do that, these days. The work of the water-crystal fairies deserves a medal, the level teaspoon meticulously exact and sprinkled with the very best of wishes for a successful life.

Climate Change Revisited

JP

In the early 1980s, the scenario for Australia was based on the primitive computer models of climate then available, together with analogies with previous warmer or colder years, droughts and wetter periods. It was suggested that global warming would produce wetter conditions in the north, where the summer monsoon is the main influence on climate, and there would be less winter and spring rain in the south. It was uncertain about changes on the east coast, the effects of the El Nino Southern Oscillation (ENSO) and how fast any changes would occur.



25 years on, the general picture has not changed much. What was predicted for the north, and the south has occurred. The main differences there are that the changes have happened faster than expected, and the impacts are more severe, especially on rainfall and water supply.

In the 1990s, it was being predicted that carbon dioxide levels in the atmosphere would rise, as would global average surface temperature and sea level. In keeping with the Australian Weather predictions made much earlier. These effects have happened, and at the higher end of the range of projections.

Some of the unpredicted effects that may be partly responsible for changes include the reduction in pollution from the burning of sulphur-rich fossil fuels, phasing out of the use of chlorofluorocarbons as refrigerants and propellants, lower levels of particulates in the atmosphere (particularly of aerosols over southeast Asia) and possibly the effects of stratospheric ozone deflection and changes to the strength of the East Australian Current.

The drying trend up the east coast of Australia has no really good explanation, however the longer-lasting El Nino (lower or more negative SOI values) seem to be implicated. Whether the horse is lying down, or the ants moving their eggs up higher, are less likely explanations. There is some evidence that El Nino frequency may be linked to the enhanced greenhouse effect, but it is not certain.

At present, major aquatic weed outbreaks are limited. They need to be contained before they achieve their full potential spread. Lack of rain has helped to keep them fairly stable in their occurrence – it won't always be like that. The "potential distribution" maps of some of the worst water weeds, with or without the climate change predictions being true, are alarming.

Black-necked Stork

BR

The Black-necked Stork or *Jabiru* is one of the most spectacular of the birds which may be seen in this area. Standing up to 1.4 m in height and with a wing span of 2 m, this black and white bird with a huge black bill and red legs is unmistakable. It is the only member of the stork family found in Australia and is found across N. Australia and down into northern N.S.W. It is rare in Caboolture Shire but has been seen recently at CREEC and at Norfolk Lake. Individuals are seen, usually in winter, in farm dams and coastal wetlands. Immature birds are brown with grey bills. Adult females have yellow eyes differentiating them from males, which have black eyes. These birds are being seen less locally as urbanisation reduces suitable feeding areas. If you see one, please report it to Faunawatch.



Public and Private Transport

The energy savers are advising us to use public transport in preference to our motor vehicles, wherever possible. A recent Sydney study has shown trains and buses are not dissimilar in energy requirement per passenger kilometre – both suffer from not being able to take us from our homes to where we want to go. Trains are better during peak times, with less hold ups at the traffic lights, than cars or buses. In terms of emissions, cars aren't all bad, depending on make, size, distance travelled and number of passengers.

1.7 billion. The limit is probably set by water availability – somewhere between 50 and 188 million, according to earlier CSIRO estimates of food production capacity. Four minute showers may have to give way to a rub over with red ochre and cow fat.

By the way, Charles Darwin, who visited in 1839, wrote in 1845: “I formerly imagined that Australia would rise to be as grand and powerful a country as North America, but now it appears to be that such future grandeur is rather problematical.”

Aquatic Weed Dispersal

JP

Water weeds cost millions of dollars for their management and in lost production. They interfere with recreation, destroy aquatic habitats, are highly invasive and create health risks.

Our declared water weeds are hyacinth, salvinia, cabomba and water lettuce. There are many others which are environmentally threatening, How are they spreading?



Many dams and creeks have become infested by emptying fish tanks into farm dams, with subsequent flooding contaminating considerable lengths of waterway. Some water resources have been deliberately “planted”, to provide shade or shelter for aquatic birds and amphibians.

Some people blame birds for spreading weeds, wild ducks being top of the list. A recent study by undergraduate students from the University of the Sunshine Coast found that water birds do have the means and the opportunity to spread weeds quite widely. The dusty moorhen targets cabomba as a food source and may play an active role in its dispersal within an already infected site.

As is usual with researchers, further studies need to be conducted – seemingly simple propositions can easily grow into problems of major proportion. Regardless, it is important for people living near water bodies to get to know the differences between good and bad.

What is happening out there and what might happen in the future, doesn't make exciting reading. Barrie Pittock, of CSIRO; the pioneer researcher of climate change in Australia, writing on the Enhanced Greenhouse Effect (Journal of the Australian Water Association, June 2007, 42-48), recommends the adoption of a risk management strategy, as the situation for water supplies will get worse, rather than better, in the longer term. Save it, store it, pipe it, stop wasting it, ration it, recycle Dams.... Desalination....tanks....

Things Not to Look Forward to

JP

If there should be a doubling of carbon dioxide in the atmosphere, global temperatures will increase well above 3°C, not the 1.5° to 4° assumed a decade ago. “Global dimming”, the cooling due to pollution from particulates in the atmosphere reflecting solar radiation, is likely to decrease. Permafrosts – the frozen peat bogs of the north, are melting, releasing not only carbon dioxide, but methane, which has about twenty times the warming potential of CO₂

The capacity of plants and oceans to absorb carbon is reducing – they've done a great job in the past, but they have their limits. Arctic ice and snow cover are decreasing fast, so less sunlight is being reflected back into space. Changes in the air and sea circulation are occurring, transferring heat to the poles, and accelerating the melting of ice. Sea level rises (now expected to be more than 1 metre by 2100) could counteract the expected effects of snowfall gains which will result from higher atmospheric humidity.

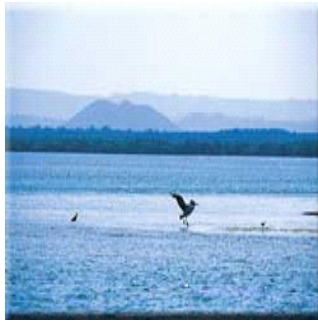
Long term climate changes will involve extreme weather events like floods, droughts, heat waves, tropical cyclones; increases in tropical cyclone wind speeds of up to 10%, higher bushfire danger. Warming of the Coral Sea will cause extensive ‘bleaching’ of the Barrier Reef. Vector-spread diseases such as malaria and dengue fever will spread south.

15-40% of native species of fauna will face extinction. Are we included?

Coastal Heritage

JP

Perhaps we forgot the importance of 3 June in our Sustainable Living Fair preparations and events during the day. It was on that date, 15 years ago when the High Court of Australia overturned the legal fiction of *terra nullius* and recognised that indigenous people in Australia had rights of ownership to their traditional lands. It would have been appropriate if, at the same time, the concept of *marae nullius*, an empty sea, without owners, had also been overturned.



Australia's coastlines are not just the destinations of the sea change development fashion, nor are they just home to important habitats for marine and terrestrial birds and other animals. The coastal zone is a place of traditional importance to indigenous communities, as a source of resources and as an important part of their stories of the creation of the landscape. Many sites have been lost to storm surges, beach erosion, tourism, housing development and rising sea levels. What has survived is in need of recognition and protection, so that thousands of years of indigenous cultural heritage is not lost forever.

While we are more familiar with the concept of water Catchment planning, it is only more recently that sea country planning has received attention. These plans explain the connection of indigenous people to their traditional coastal and marine environments at a local scale and set out how government agencies, industry and other stakeholders can work with them to implement the proposed strategies.

The recent edition of Waves (vol 13, no3) outlined some of the projects being undertaken as part of the overall program for marine and coastal biodiversity conservation and sustainable use. The National Office of the Marine and Coastal Community Network is administered by the Australian Marine Conservation Society at Manly (phone 3393 5822 for more information; or check www.mccn.org.au)

There is a conference on the Sunshine Coast 20-22 August set coastal priorities – (Info at www.seachangetaskforce.org.au).

On 17-19 September, there is the Queensland Coastal Conference at Bundaberg, hosted by the Burnett Mary Regional Group for Natural Resource Management Inc.

Water, Population and Australia's Urban Future

JP

This was the focus of the 2007 Fenner Conference on the Environment in Canberra, examining the “critical and increasingly shaky relationship between water and population distribution.”

There is a mismatch between where the water is and where people are located; most of the water in the south-eastern part of Australia is already committed. In the far north, we have 2% of the population and over 50% of the runoff. While people are quite mobile (18% of the population moved house last year), population distribution hasn't changed much, Southeast Queensland being the exception.

In many regions of Australia which are experiencing the ‘sea-change’ phenomenon, water is becoming the limiting factor for further development and immigration.. While our mythology is rural-based, the reality is that we are coastal urban residents. Hence the need for local water-resources expenditures on a vast scale – about \$10,000 per capita over the next few years.

Our population, 21 million at the end of June, is growing at 1.3%; this is faster than the Asia-Pacific region and three times as fast as the OECD average. In the 2020s, about 25 million people are probably a sustainable number, certainly not many more than this. Just add another Queensland to the current Australian total.

Population targets for Australia vary. In 1990 Ehrlich suggested 10-12 million, Flannery somewhat less. At world's lowest average standard of living, it is 600 million. If we were prepared to live at the subsistence level set by the efficiency of photosyntheses, and given the current rainfall, it is