



# Cornubia Wetland Reserve

Newsletter number 4, May 2011

Supported by the Logan City Council Envirogrant Program and written and compiled by Barry Fitzpatrick  
[www.wetland.yolasite.com/](http://www.wetland.yolasite.com/)

This is the fourth in a series of newsletters about the Cornubia Wetland Reserve. These newsletters will keep the community informed about the surveys and management practices being carried out in this important piece of biodiversity infrastructure. See bottom of page 4 for further background.

## Waterways Summit to be held in July

Following two successive years of 'Fails' for the Logan/Albert Rivers and Southern Moreton Bay on the Healthy Waterways Annual report Card (see [www.healthywaterways.org](http://www.healthywaterways.org)), calls from The Logan and Albert Conservation Association and Logan Councillor Lisa Bradley for a waterways summit are finally coming to fruition.

The Waterways Summit is being organised and hosted by the Logan City Council, and will be held in late July at the Logan Entertainment Centre. It is planned to have all levels of Government in attendance, along with representatives of stakeholder groups from across the whole river and southern bay system.

The aim of the Summit is to establish a new plan of action for these waterways which will reverse the downward spiralling quality of water in the rivers and bay, now seriously affecting important fish breeding and dugong areas such as mangroves and sea grass, and threatening to destroy the values and amenity of the southern bay area.

The healthy Cornubia/Loganholme Wetland Area, part of which can be seen above right during the January floods, continues to provide clean, filtered water into the Logan River and Southern Moreton Bay. However it is one of just a small handful of riparian (riverside) and wetland areas left now along the entire river which remain more or less intact and functioning as filters. Much more needs to be done along the whole river system to significantly reduce the many thousands of tonnes of sediment and nutrients that wash off the landscape into the river each year. This is what the Waterways Summit will be looking at in July.



Cornubia Wetland area during January floods. Water in the centre of picture would be around two metres deep.



Wildflowers on the Cornubia wetland area. Patches of pink flowered *Pericaria subsessilis* mingle with ferns and sedges out on the wetland. These plants are related to the Federally listed endangered plant *Pericaria elatior* (see picture top left this page) which also occurs here.



Removal of trees and other vegetation from the banks of the Logan River has resulted in the serious erosion issues evident in the picture at left, taken several kilometres upstream from the bay.



# They all bred here this summer...These are just some of the animals, birds and fish observed breeding and raising their offspring on the Cornubia Wetland reserve this year.



Above: Swamp Wallaby and joey, photographed in February this year on the edge of the Cornubia Wetland. Below: Magpie Geese with their two remaining chicks in tow, photographed on the wetland in April.



Below: Carpet snake which laid 13 eggs in a compost heap on the slopes just above the wetland.



Above, Firetail Gudgeon and left, Glassfish. These exploded in numbers following rains in January. Both fish species eat mosquito larvae

Kids—win \$25! see below



Left, Lewin's Rail. This rare bird makes a loud tick tick tick sound. It bred on the wetland this year, as did a similar species, the Spotless Crane, left



Competition: Name the rest of the animals on this page  
**Kids—win \$25!! All the animals numbered 1– 16 on this page bred and raised their young on the Cornubia Wetland this year. The first person to correctly name all 16 will win \$25. Send your list of names, numbered 1-16 as they appear on this page to :  
[piccabeen1@bigpond.com](mailto:piccabeen1@bigpond.com)**





### University project continues



Above: QUT's Jason Wimmer, installing an acoustic sensor on the Cornubia Wetland.

The Queensland University of technology's acoustic sensor project continues on the Cornubia Wetland area. This is a three year research project trialling acoustic survey systems using conventional mobile phone technology to send bird, frog, koala and other animal sounds back to the university's computers where a list of species is automatically generated from the sound signals received. This system is designed to avoid damage caused by on site fauna surveys, and to give a long term, 24/7 record of species living in or visiting a site over months or even years. The study so far has confirmed the presence of a number of rare and uncommon species on the Cornubia Wetland area, including the Lewin's Rail, which appears to have bred this year in the wetland.

**The QUT project on the Cornubia wetland area is being supported in part through the Logan City Council's Envirogrants Program.**

### Bush Care

Bush care is funded and supported by the Logan City Council. Areas out on the wetland and in a section on the slope below Watercress Avenue and Egret Court are being restored by a small group of volunteers. More volunteers are desperately needed to help manage and restore this unique area. If you can spare a couple of hours once a month (on Sundays) it would make a great difference. You can join Bush Care and help the Cornubia Wetland and its inhabitants by phoning Peter May at the Council on 34125578 or Barry Fitzpatrick (Egret Court, on 0427002640.



### Salvinia control

Salvinia is regarded as one of the world's worst water weeds. From South America, it was introduced to Australia by aquarium and pond keepers releasing it into our waterways. The CSIRO tested a natural enemy of the Salvinia—the Cyrtobagous weevil - and successfully released it into many of our lakes and streams. In sub-tropical SE Queensland the weevil may take up to two years to clear Salvinia. Small amounts of the plant will always remain however, so repeated cycles follow in which the Salvinia builds a little until the weevil controls it again each season. The picture above shows contractors removing some Salvinia off the water late last year. This had the effect of thinning the Salvinia across the lagoon, allowing the Salvinia weevil to work more effectively. Floods in January removed a lot more Salvinia, but it grew rapidly to cover the lagoon again by the end of February. Since then the weevil has worked really well and now large brown, thinned areas of Salvinia show that the weevil is gradually clearing the weed off the surface.



**Guess what these are!** These extraordinary creatures are actually chicks of the Pheasant Coucal, which breeds each year on the slopes above the wetland. The nest is always situated on the ground in thick grass, which makes these bizarre little hatchlings prime targets for straying cats. [Please don't let your cat wander – day or night.](#)

Right: Adult Pheasant Coucal



**This Koala** was photographed last year in a tree next to the wetland. It is possible that Koalas are breeding around the wetland site too. There are plenty of their favourite food trees (Eucalyptus tereticornis) on the alluvial flats around the wetland.





Cornubia Wetland reserve

### **New United Nations Study shows Investing in nature is more valuable than gold**

The results of a long term study into the economic value of natural systems were released in October 2010 at a major conference in Nagoya, Japan. Carried out by the United Nations with financial support from the European Commission, the German Federal Ministry for the Environment and the UK Department for Environment, Food and Rural Affairs, the study, called The Economics of Ecosystems and Biodiversity (TEEB), concluded that **setting aside protected areas provided a ratio of benefits to costs of between 25-to-one and 100-to-one.**

The study was the most comprehensive overview of existing thinking in this area to date, and the process brought scientists and economists together to provide the analysis and tools required to build a robust methodological framework so that decision-makers at all Government levels can successfully do economic analyses of their own ecosystem services and biodiversity.

#### **Its many findings covering 1100 sites around the world included:**

- a Costa Rican study showing that areas of intact forest increase the yield of coffee farms by 20% because they shelter pollinating insects
- a grassland conservation area in New Zealand that supplies the Otago region with free water that would cost \$100m per year to bring in from elsewhere
- in Vietnam, planting and protecting nearly 12,000 hectares of mangroves cost the government \$1.1m but saved annual expenditures on dyke maintenance of \$7.3m
- In Venezuela, investment in a national protected area is preventing sedimentation that would reduce farm earnings by about \$3.5 million a year
- Sea grass, mangroves and salt marshes may be sequestering half of the world's transport carbon emissions
- World annual losses as a result of deforestation and forest degradation equate to between \$2 trillion and \$4.5 trillion. These could be prevented with an investment of \$45 billion.

The study concluded that **Governments must make biodiversity a significant, mainstream factor in decisions across all departments.** For more information go to <http://www.teebweb.org/>

Some background information on this Envirogrant project:

The Council-owned Cornubia Wetland reserve (8 hectares) is part of the 80 hectare Loganholme Wetland, circled by major transport corridors and urban and light industrial development. It drains into the Logan River to the south. In spite of its urban location, the Cornubia reserve has remained in a very healthy condition. For the past 4 years a survey of plants, animals, fish and frogs on the reserve area has continued with funding through the Logan City Council's Envirogrant scheme. Weed management and eradication have been carried out, along with monitoring of pest species. The results of the survey have been very exciting, with 121 bird species listed to date and the discovery of a rare bird species, along with one vulnerable and several uncommon plant species in the reserve. Supplying a range of valuable ecosystem services to the community, including water filtering and mosquito control, the wetland is an excellent illustration of the TEEB conclusion (see above) that healthy ecosystems and biodiversity provide significant economic benefits to the community. – Barry Fitzpatrick (0427002640)



Aerial view of whole wetland complex with the 8 hectare reserve middle right, outlined in black