

Frugivory Updates



**No. 43
March
2011**

Welcome to our new style

The mailing list has become long and unwieldy, and it is laborious to keep track of who has dropped out, who is still with us etc., plus I had to create three lists of names and emails because there were too many for one list. Then I found out about MailChimp, and have been using it for newsletters of two associations I'm chair of (Scenic Rim Wildlife and Wildlife Tourism Australia). When I tried to set it up on the computer I use at Griffith University I found that the version of Internet Explorer installed on it was too old to use MailChimp satisfactorily, so I'm sending this from home.

Let me know if there are any problems and you may like to let me know what you think of the new look.

Historically, I started organizing the first Frugivory Updates according to geography, as it started out with a small group of us who met at an international congress and decided it would be good to keep in touch. I've more or less stuck to that way of organizing ever since, and will probably continue to do so unless there are objections. In this issue then you will find:

- [Australasia](#)
- [Africa](#)
- [South and Central America](#)
- [North America](#)
- [Europe](#)
- [Asia](#)

Please let me know your news before the next issue

Cheers

Ronda Green

Australasia (Australia, New Guinea and New Zealand)

Floods, cyclones and cassowaries

You have probably heard of the wild weather Australia has been battered with recently. In the worst-affected areas, people have lost homes, businesses and even family members to floods and violent winds.



Wildlife has also suffered in some areas, both directly and indirectly. Bodies of drowned animals have been washed from the hills down to the sea in flash floods, but there have also been some delightful photos of wallabies being rescued in canoes and even a green tree frog hitching a ride on the back of a swimming snake. Wildlife hospitals and wildlife carers have been kept busy. We were just settling down a bit from the shock of massive flooding when the worst cyclone ever to hit Australia came across the coast at Mission Beach - well-known for its seaside resorts and its cassowaries - just south of Cairns. Southern cassowaries - the most important dispersers of large fruits in our wet tropics - are already endangered due to habitat clearing, as well dog attacks and traffic collisions (which mainly happen because of the severe habitat fragmentation forcing cassowaries into open areas). Now suddenly within hours many tracts of remaining coastal forest have been devastated.

Floods and cyclones are natural events that have occurred many times over the millenia, but nowadays animals fleeing the immediate impact are faced with large tracts of unsuitable habitat to escape to (cow paddocks, suburbia etc.), and where populations severely dwindle there is far less neighbouring habitat than there once was as a source for recolonization as water recedes and trees regenerate.

Cassowaries that survived the cyclone at first had a literal windfall of fallen fruits, but now it is lean pickings as the badly damaged trees, shrubs and vines (and of course the dead ones) are just not producing their usual supplies in many areas. The Queensland Department of Environment and Resource Management recognizes the plight of these birds and conducting food drops, but warning visitors and residents not to handfeed these

huge birds. Like many wild animals, if they come to associate humans with food they may get annoyed later with humans who do not produce any for them. Cassowaries have powerful feet and legs quite capable of severing a femoral artery, so it's not quite like being pestered by a seagull. See DERM's article on [Cassowaries and Tropical Cyclone Yasi](#) and the links to quite a lot of information and news about cassowaries below the main article.

Cassowaries in New Guinea

A new reader, Margaretha Pangau-Adam, who I had the pleasure of meeting in Lombok at the German Alumni Summer School last year (I'm not part of the German alumni, but was an invited speaker), is studying northern cassowaries in New Guinea. Margaretha is originally from Sulawesi, Indonesia, but currently working through Gottingen University in Germany. If you'd like to discuss northern cassowaries (ecology, behaviour and human-bird interactions, especially the effects of hunting) with Margaretha, her email is <ethapangau@yahoo.com>.

See also Pangau-Adam, M. and Noske, R. 2010. **Wildlife hunting and bird trade in Northern Papua (Irian Jaya) Indonesia**. In S. Tidemann and A. Gosler (eds) [Ethno-ornithology: birds, indigenous peoples, culture and society](#). Earthscan, UK

Frugivores and parasitic plants

Watson, D. M., McGregor, H. W. and P. G. Spooner [Hemiparasitic shrubs increase resource availability and multi-trophic diversity of eucalypt forest birds](#). In **press**. **Functional Ecology**

"Parasitic plants are components of many habitats and have pronounced effects on animal diversity; shaping distributions, influencing movement patterns and boosting species richness. Many of these plants provide fleshy fruit, nectar, foliar arthropods and secure nest sites, but the relative influence of these nutritional and structural resources on faunal species richness and community structure remains unclear..."

Evolutionary traits in New Zealand fruits

A recent (2009) PhD thesis by Adrienne Markey concerns the evolutionary trends of Coprosminae fleshy fruits. It is not available online (although the [abstract](#) is), but can

be obtained through inter-library loan.

In the Coprosminae, fleshy drupes have arisen from dry fruited schizocarps and with two possible reversals to semi-dry drupes. Within Coprosma, fruit colour was found to be evolutionarily labile and varied both among and within lineages, particularly within two main groups where fruit colour had shifted from orange to blue and white, or red, pink and black colours respectively. The evolution of novel (non-orange) fruit colours was restricted to New Zealand ..."

Africa

Primate Frugivory

The next International Frugivory Symposium/Workshop will, as you know, be in South Africa in 2015

Meantime, you may like to view this article by Joanna Lambert, who reviews some of the primate-relevant presentations from the past two symposia and anticipates the next [Primate frugivory and seed dispersal: implications for conservation and the maintenance of biodiversity](#)

South and Central America

Toucan references

There seems to be a lot of links [here](#) to pdf's with information about toucans, some of which appear to be relevant to frugivory and seed dispersal

North America

A review of fruits and frugivory - worldwide

[Fleming, T. H. and W. J. Kress. In press. A brief history of fruits and frugivory. Acta Oecologica](#)

"In this paper we briefly review the evolutionary history of the mutualistic interaction between angiosperms that produce fleshy fruits and their major consumers: frugivorous birds and mammals...."

Fire and the forests

With global climate change may be predicting we will see increased fire intensity and frequency in many areas, which could well disrupt some frugivore - plant interactions. The following conference is to be held in Florida this November - Abstract submission due 6th May 2011

[Exploring the Mega-fire Reality 2011](#): A Forest Ecology and Management Conference
14-17 November 2011, Florida State University Conference Center, Florida, USA

Asia

Cassowaries in New Guinea

I've put this article above in Australasia, as physically New Guinea is part of this complex, but politically the western half belongs to Indonesia, so am cross-referencing [here](#)

Conservation of Figs and Frugivores in Assam, India

Just noticed this project as the recipient of a [Rufford Small Grant](#), but I'm not sure how recent the news is:

"The project will investigate the role of *Ficus* trees in agroecosystems as a food source for frugivores and identify threats to figs and frugivores in Assam. It will explore local perceptions and social practices relating to figs in different agroecosystems and assess the feasibility of a community-based Fig conservation programme in the region".

Europe

A plant that started in Europe but spread to many countries

Blackberries and other *Rubus* species are invasive largely because of frugivorous birds that spread the seeds (and their well-protected foliage that makes them unavailable to some browsing animals)

[The pdf of a book chapter](#) soon to be published in the UK includes basic biology, conservation, genetics and other issues

[top of page](#)