

In This Issue

| | |
|--|---|
| In This Issue..... | 1 |
| What is It? | 1 |
| Crossword – focus on Acacias | 2 |
| Advertorial | 3 |
| Fuel desperately needed for Hwange..... | 3 |
| Aeroplane-sized fossil bird find | 4 |
| Gadgets threaten energy savings | 4 |
| The New Seven Wonders of the World | 5 |
| Maybe it should be spelled Cheatah? | 6 |
| Namibian seal hunt begins | 7 |
| There may not be enough metals in earth to meet global demand..... | 8 |
| What is it – Answer | 9 |
| Crossword – last month’s solution | 8 |
| References | 9 |

Subscribe to 

What is It?

This strange creature is obviously an insect, but **what** type of insect is it?

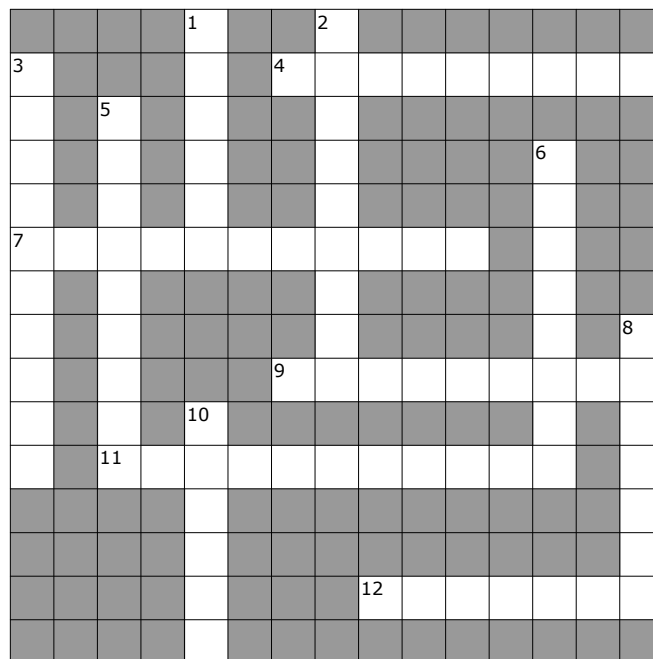


Photo Credit: Stefan Winterboer

If you have any interesting photos you would like me to include in this section, please email a (small) copy to me.

Opinions expressed in this newsletter are not necessarily those of Enviroskills or of the editor. Enviroskills is not liable for any errors or any actions in reliance thereon.

Crossword – focus on Acacias



Created with EclipseCrossword — www.eclipsecrossword.com

Across

4. The stalk of an *Acacia* "leaflet" (9)
7. Afrikaans name for an *Acacia* species which is derived from the action of its thorns on a passer-by (11)
9. The new generic name that botanists are considering giving to the African Acacias (9)
11. Flattened leaf stems found on many Australian Acacias that resemble and function like a leaf (11)
12. Complex phenolic substances produced by plants that affect their palatability and digestibility (7)

Down

1. The proper name for the "leaflets" on a twice-compound leaf (6)
2. *Acacia* species originally thought to have caused malaria and blackwater fever (9)
3. New generic name for *Acacia albidia* (10)
5. Resin taken from *Acacia senegal* used as a thickening agent in boiling sweets, jelly beans etc (3+5) (9)
6. The specific botanical name of an *Acacia* derived from the twisted appearance of its pods (8)
8. These *Acacia* trees are serious alien invaders from Australia (7)
10. The axis of a bipinnate leaf (6)

[To Top](#)

It is imperative to maintain portions of the wilderness untouched so that a tree will rot where it falls, a waterfall will pour its curve without generating electricity, a trumpeter swan may float on uncontaminated water - and moderns may at least see what their ancestors knew in their nerves and blood.

Bernard De Voto, Fortune, June 1947

Advertorial

I have always avoided anything commercial in the newsletter, but in this case I solicited advertorial from Megan Alves, director of the company The African Chapter. Megan is a qualified and experienced field guide and she approaches the travel industry from that perspective. Of particular interest in this context, is their programme to allow freelance and specialist guides to register with them as "team members". Their site is well worth a visit.



[African Chapter](#) provides sensational African experiences to the book of your life! A web-based tour broker, specializing in wildlife destinations, golf safaris, bush incentives and conferences as well as various day activities, such as hot air balloon safaris, elephant interactions, canopy touring to quad safari and spa experiences.

Our team of professional, experienced and knowledgeable individuals regard the various aspects of travelling to Southern Africa as important as your needs and offer a personalized service, where your requirements and needs are perfectly incorporated into your quality travel itinerary.

Opt from pre-packaged trips or complete our online bookings form for a tailor-made journey, alternatively browse through our many lodges and activity suggestions. You cannot afford arriving before visiting our user-friendly website categorized for easy reference and elaborating on various points regarding our beautiful region.

A hassle free solution to any African journey, our additional benefits such as freelance guides who work hand in hand with the African Chapter in ensuring our trips are educational as well as provide qualified local conversation along the way.

[Safari guides](#) are offered the opportunity to join the [African Chapter](#) through our web-based facility where their details and interests are listed on our website for the convenience of both travel trade and the individual visiting certain areas. Drawing from these knowledgeable guides and rangers for the duration of your stay in Africa ensures yet another sensational chapter to add to your book of life!

Please visit the [African Chapter website](#) for further details or call our offices on +27 (0) 11 805 4522 or mail us at info@africanchapter.co.za

[To Top](#)

Fuel desperately needed for Hwange

The following urgent plea comes from the Zimbabwe Conservation Task Force.

"There is once again a critical shortage of fuel to pump water into the pans for the animals in Hwange National Park which is not surprising in view of the extreme shortage of basic commodities in Zimbabwe. The park needs 20 000 litres of diesel to ensure that there is enough water for the animals to drink during the dry season (August to November) if we are to avoid a repetition of the water crisis of 2005.

We realize that with the enormous difficulties we are experiencing in Zimbabwe at the moment with simple day to day living, most people will not be able to assist the wildlife as they have done in the past, much as they may want to, but if anyone is in a position to help with either

fuel or the funds to buy fuel, please contact us. We would be extremely grateful. Our contact details are below".

Johnny Rodrigues – (Chairman for Zimbabwe Conservation Task Force)

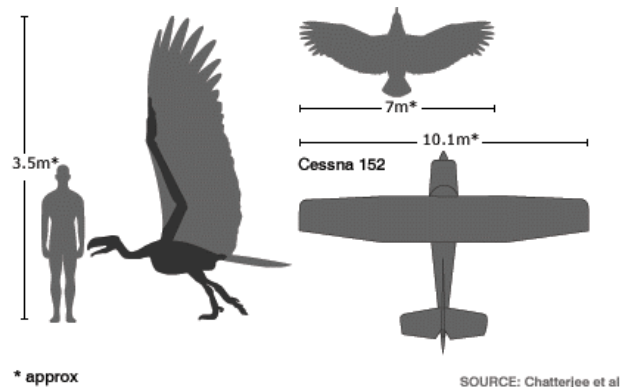
Tel: 263 4 336710
 Fax/Tel: 263 4 339065
 Mobile: 263 11 603 213
 Email: [galorand@mweb.co.zw](mailto:galand@mweb.co.zw)
 Website: www.zctf.mweb.co.zw

[To Top](#)

Aeroplane-sized fossil bird find ⁱ

We have all heard the question "what is the heaviest flying bird", and have probably engaged in an argument over the relative sizes of the kori bustard, Andean condor and trumpeter swan, which are all rivals for the title at around 11–18 kg each. But, which was the largest bird in history ever to have flown? The answer is *Argentavis magnificens*, a six million year old species that lived in Argentina. The bird had a seven-metre wingspan and weighed in at 70kg. Because of its massive size it probably had great difficulty getting airborne or in sustaining normal flapping flight, but it would have been an expert thermal soarer and glider.

As massive as this bird undoubtedly was, it was small compared to the largest flying creatures of all time – the pterosaurs. Some of these gigantic flying "reptiles" had wingspans of more than 10 m!



[To Top](#)

Gadgets threaten energy savings ⁱⁱ

While the trend among most consumer items is towards more energy efficient designs, consumer electronics are hogging electricity more than ever before. Washing machines, dishwashers, fridges and freezers are now much more energy efficient than ever in the past, while consumer electronics have shown the opposite trend. Old cathode ray tube TV's used about 100 watts of electricity when turned on, but modern flat screen designs typically use about three times that amount.

Another massive problem is the remote standby on these items - most gadgets use almost the same amount of energy while standing by as they do when operating. Many cellphone chargers that are plugged in but are not charging use a small amount of electricity – around 1 watt per day. The UK based Energy Saving Trust have estimated that annual CO₂ emissions (in the UK alone) from devices left on standby are as follows:

- | | | | |
|------------------|------------------|-----------------|----------------|
| • Stereo systems | 1,600,000 tonnes | • Consoles | 390,000 tonnes |
| • Videos | 960,000 tonnes | • DVD players | 100,000 tonnes |
| • TVs | 480,000 tonnes | • Set top boxes | 60,000 tonnes |

The message is simple - **Switch things OFF if you are not using them – do not "stand by" and waste our energy!**

[To Top](#)

The New Seven Wonders of the World ⁱⁱⁱ

Although not really related to the natural environment, this is of interest nonetheless. I believe that it represents a shift in thinking towards conservation of things valuable and irreplaceable. Hopefully this mentality will shift towards more concerted efforts at preservation of natural heritage sites and other wild areas.

The seven wonders of the ancient world show us just how transient the concrete signs of human efforts actually are. All the ancient wonders of the world (with the exception of the Great Pyramid of Giza) are now obliterated. Realising this, in 2001, Swiss adventurer Bernard Weber created an organisation called The New7Wonders Foundation, (to document, maintain, restore and reconstruct world heritage under the motto: "OUR HERITAGE IS OUR FUTURE."

The new seven wonders list was announced on July 7, 2007.

The Old Seven Wonders of the Ancient World were;

1. The Great Pyramid of Giza
2. The Hanging Gardens of Babylon
3. The Statue of Zeus at Olympia
4. The Temple of Artemis at Ephesus
5. The Mausoleum at Halicarnassus
6. The Colossus of Rhodes
7. The Lighthouse of Alexandria

The New Seven Wonders of the World are;

1. The Great Wall of China - built to link existing fortifications into a united defence system and better keep invading Mongol tribes out of China. It is the largest man-made monument ever to have been built.
2. Petra – on the edge of the Arabian desert in Jordan, Petra was the capital of the Nabataean empire of King Aretas IV (9 B.C. to 40 A.D.). The Palace Tombs of Petra, with the 42-meter-high Hellenistic temple facade on the El-Deir Monastery, are impressive examples of Middle Eastern culture.
3. Christ Redeemer – this (1931) statue of Jesus stands some 38 meters tall, atop the Corcovado mountain overlooking Rio de Janeiro. Designed by Brazilian Heitor da Silva Costa and created by French sculptor Paul Landowski, it is one of the world's best-known monuments. The statue took five years to construct and has become a symbol of the city and of the warmth of the Brazilian people, who receive visitors with open arms.
4. Machu Picchu – this ancient Peruvian city (1460-1470) was built by the subjects of the Incan Emperor Pachacútec on the mountain known as Machu Picchu ("old mountain"). This extraordinary settlement that lies halfway up the Andes Plateau, deep in the Amazon jungle was probably abandoned by the Incas because of a smallpox outbreak.
5. Chichén Itzá –the most famous Mayan temple city which served as the political and economic centre of the Mayan civilization.
6. The Roman Colosseum - this great amphitheatre in the centre of Rome was built to give favours to successful legionnaires and to celebrate the glory of the Roman Empire. Its design concept still stands to this day, and virtually every modern sports stadium some 2,000 years later still bears the imprint of the Colosseum's original design.
7. The Taj Mahal - this huge mausoleum was built on the orders of Shah Jahan, the fifth Muslim Mogul emperor, to honour the memory of his beloved late wife. Built out of white marble and standing in formally laid-out walled gardens, the Taj Mahal is regarded as the most perfect jewel of Muslim art in India.

The natural wonders of the world are not fully agreed upon, but most lists include the following;

- Angel Falls - Venezuela
- The Bay of Fundy - Nova Scotia, Canada
- The Grand Canyon - USA
- The Great Barrier Reef - Australia
- Iguassu Falls - Brazil/Argentina
- Krakatoa Island - Indonesia
- Mount Everest - Nepal
- Mount Fuji - Japan

- Mount Kilimanjaro - Tanzania
- Niagara Falls – Canada/USA
- Paricutin Volcano - Mexico
- Victoria Falls - Zambia/Zimbabwe

The Seven "Blunders" of the World ^{iv}

This is a list that Mohandas (Mahatma) Gandhi gave to his grandson Arun Gandhi, written on a piece of paper, on their final day together, not too long before his assassination. The seven blunders are:

- | | |
|--------------------------------|-------------------------------|
| 1. Wealth without work | 5. Science without humanity |
| 2. Pleasure without conscience | 6. Worship without sacrifice |
| 3. Knowledge without character | 7. Politics without principle |
| 4. Commerce without morality | |

This list grew from Gandhi's search for the roots of violence. He called these acts of passive violence. Preventing these is the best way to prevent oneself or one's society from reaching a point of violence. To this list, Arun Gandhi added an eighth blunder, Rights without responsibilities.

[To Top](#)

It is horrifying that we have to fight our own government to save the environment.

Ansel Adams

Maybe it should be spelled Cheatah? ^{v vi}

Infidelity is commonplace in nature – more so than is fidelity, and there are many reasons why this is good. Take for example most eagles which supposedly pair for life. Their loyalty is often cited as one of the good virtues of nature, but behind the scenes they are just as likely to cheat as any other animal. The reason is that they just can't take the chance that their partner is not an optimal mate. By mating "illicitly" they are ensuring that their genes are being continued and that genetic variation is being bred into the species.

In May this year, research conducted in Tanzania and Kenya by Dada Gottelli and others from the Zoological Society of London revealed that cheetahs also favour this strategy. By analysing DNA taken from scat samples of 176 different animals, they found that cheetahs are serial cheaters with nearly half of their litters made up of cubs from different fathers. Of 47 litters of cubs, 43% contained cubs from multiple fathers. In some cases, **three males were responsible for the cubs of just one litter!** "If anything, this is an underestimate," said Ms Gottelli. "Cheetah cubs suffer high mortality on the first few weeks so it was difficult to get samples from all of them." **Interestingly, lion and leopard were found to be far less cuckold than cheetahs.**

Female cheetahs are able to successfully mate with multiple males as they produce a new egg each time they mate, a process known as induced ovulation, which means that each egg can in theory be fertilised by sperm from a different male. The researchers have identified several possible advantages to this behaviour.

1. The increase in genetic diversity can only help to strengthen the species.
2. The behaviour may help protect cubs from marauding males. "Infanticide has not been observed in the wild cheetahs, like it has been in lions and leopards," said Ms Gotelli. "Maybe this is why. It may create confusion in the males. In that case it's better not to kill any cubs in case they were yours."

The following illustration shows how habitual infidelity can benefit the cheetah species.

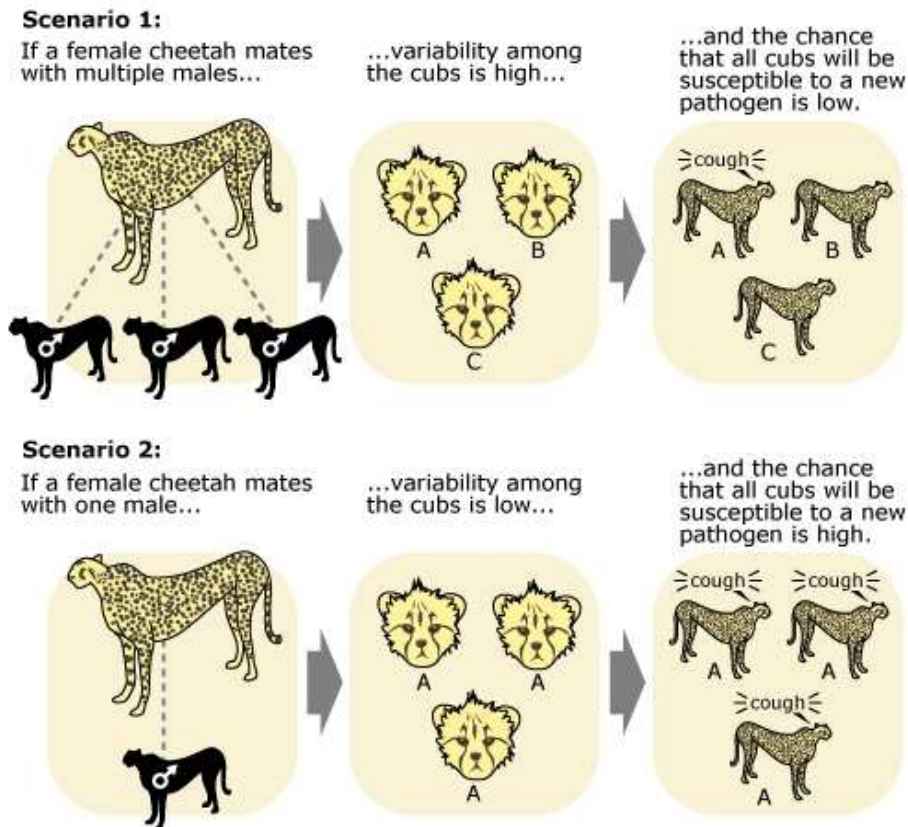


Figure 1: Illustration used with permission: UC Museum of Palaeontology's Understanding Evolution (<http://evolution.berkeley.edu>)".

[To Top](#)

Namibian seal hunt begins ^{vii}

The annual Namibia seal cull started on 1 July and it will continue for five months. The country's estimated 850 000 seals live on coastal islands and are cropped annually to keep their numbers in check. The total to be culled this year is 6000 adult male seals and 80000 pups - up from 20000 last year. Arguments abound around this sensitive topic.

- The government argues that the seals are consuming 900 000 tons of fish a year, more than a third of the fishing industry catch.
- Seal Alert calls the clubbing method inhumane, and points to other aspects of the hunt it says are cruel or unnecessary.
- *"The sealers are targeting male pups, which are bigger than the females. The irony of the matter is it is allowing the breeding cows to mate and raise their babies while consuming the same fish it says it is protecting. Namibia is just creating a surplus of female breeders"*
- Nangula Mbako, permanent secretary in the Ministry of Fisheries and Marine Resources, said Namibia used its natural resources in line with UN Food and Agriculture Organisation guidelines. *"The rural poor, women, children and the most vulnerable societies are the ones mostly affected by withholding exploitation of sustainably managed resources such as seals"*.
- Seal Alert says "... It's not the seals that are at blame here. It's the many trawlers on its waters"

[To Top](#)

What is it – Answer

The insect shown belongs to the family of stalk eyed flies (*Diopsidae*). There are several hundred known species distributed mostly in the tropics, although some species are known from Europe and America. The adults appear to feed largely on fungi and bacteria which they find on decaying vegetation, particularly around riverine areas. The larvae develop in decaying vegetation.

Some flies in other families also have stalked eyes, but characteristic of this family is the fact that the antennae are located next to the eyes on the end of the stalk as can be seen (arrowed) in the photograph. The other forms have their antennae on the head between the extended eyes.

[To Top](#)

References

i

<http://news.bbc.co.uk/2/hi/science/nature/6262740.stm>

ii

<http://www.energysavingtrust.org.uk/>

iii

<http://www.new7wonders.com/index.php?id=371>

iv

http://en.wikipedia.org/wiki/Seven_Blunders_of_the_World

v

http://evolution.berkeley.edu/evolibrary/news/070701_cheetah

vi

<http://news.bbc.co.uk/2/hi/science/nature/6701515.stm>

vii

http://www.iol.co.za/index.php?from=rss_SciTech%20Environment&set_id=1&click_id=143&art_id=nw20070706180951311C305846

viii

http://www.terraily.com/reports/Yale_Study_Not_Enough_Metals_In_Earth_To_Meet_Global_Demand.html
