



GAZELLE

مجموعة دبي للتاريخ والطبيعي

www.dnhg.org

The Desert Date (*Balanites aegyptiaca*) in Dubai

The plant family Zygophyllaceae is a minor one on a world scale, with approximately 17 genera and 270 species, mostly found in tropical and warm arid regions. However, Zygophyllaceae comprises three genera that are very prominent in the UAE:

(1) *Zygophyllum* (now *Tetraena*) – the bright green succulent shrub with bead-like leaves that is extremely common on sandy waste ground around Dubai and also locally in shallow, sandy basins within the deep deserts of the UAE interior.

(2) *Fagonia* – the plants with four thin but very sharp spines at each node, which can make sitting down on mountain gravels an uncomfortable exercise.

(Continued on page 4)



(1) *Zygophyllum qatarense*, common on sand flats and waste ground in the Northern Emirates

Inside this month: page

The Desert Date	1
Announcements	2
The Arabian Chafer beetle	3
Sharks and Shelling (unrelated articles)	5
Shells and Groynes	6
Phalaenopsis or 'Moth' Orchids	7
Lectures and field trips	8

Contributors—Thanks to the following for their reports and contributions:

Andrew Childs, Gary Feulner,
Margaret Swan, Martina Fella and
Tamsin Carlisle.

Send **your** contributions for the next issue by 25th October to gazelleditor@gmail.com



(2) *Fagonia bruguieri*, a semi-prostrate species with 4 spines at each leaf node

Announcements and Recorders

Monthly Speaker—8pm on Sunday 9 October, 2016

The DNHG are delighted to welcome the following speakers, who will co-present an illustrated talk on:

“Shell we? Oh yes, let's! Collecting seashells in UAE and Oman - from whim to passion over three years.”

Andrew Childs and Vicky Dobson will cover how they started their interest in shelling, with no previous experience or expertise in shelling or marine biology. The presentation will show how they have progressed into collecting a fairly comprehensive (and still growing) collection of shells. It is their goal to find examples of a majority of shell species in the UAE and Oman.

This collection and their goals have, in part, been prompted by the printed works of Sandy Fowler, Kathleen Smythe and Donald Bosch, *et al.*

Andrew and Vicky will explain how much the beaches and coastline have altered since the above publications, and how certain shell names have changed in that time. They will also highlight which beaches have provided the richest pickings and may bring a box or two of shell samples that they have come across.

The speakers also encourage people to bring interesting shells that they have picked up from the UAE or Omani beaches, requiring identification. This, for each shell, is not guaranteed, but they are willing to give it a go. Bringing shells may also provoke some interesting content for discussion.

It would help if you could send a clear photograph of the shell beforehand, should research be required. Photos can be sent to andrew.childs@eim.ae up to a week before the presentation is given.

From the Editor:

As can be seen in the 'shout out' above, canvassing for speakers is underway for members night. This annual event is when members are provided with an opportunity to present a 10—20 minute talk on a natural history topic. It doesn't necessarily need to be about Dubai—tell us about the culture, plants or wildlife of your home country. Contact Michelle Sinclair, or any committee member (*see back of newsletter for contact details*) if you would like to consider making a presentation.

Shells are fascinating and the speakers this month will inspire most of us with their knowledge and enthusiasm. On a shelling trip in February, Andrew and Vicky advised looking at the tiniest of shells, to examine the intricate structure, not just to look at larger shells, which were easier to spot. Andrew Childs has also written an article on beach changes in Fujairah on p5. Beach changes in Dubai are also given some focus on p6.

Not to be confused with the date palm, the cover article this month describes the Desert Date, from the plant family. Also concerning plants, some tips are given (p7) on how to care for orchids. Although not endemic to the UAE, many own one or two. I am guilty of throwing orchids away once the flowers disappeared. Not any more!

Busy people often say they need a 'spare pair of hands.' However, the article on p3 features a bizarre beetle with 'five-fingered antennae'.

There are several different species of shark in the ocean around us. Find out where you can see a new documentary all about sharks in Arabian waters on p5.

Finally, readers are reminded that the membership form is [online](#). Should you need to renew your membership, save time by printing it out and completing it prior to the next meeting. Refer to the back page for other methods of renewal. Enjoy your read!

WANTED!

Speakers for
Members' Night
11 December

Contact: [Michelle](#)

See 'From the Editor' below
for further details

DNHG

Recorders

Reptiles - Dr. Reza Khan 050 6563601

Astronomy - Lamjed El-Kefi res: 06-5310467 off: 06-5583 003 email: lankefi@emirates.net.ae

Marine Life - Lamjed El-Kefi

Geology - Gary Feulner res: 306 5570

Insects - Gary Feulner

Fossils - Valerie Chalmers
res: 4572167 mobile: 050 455 8498
email: valeriechalmers@gmail.com

Plants - Valerie Chalmers

Archaeology - MaryAnne Pardoe
mobile: 050 724 2984 email: maryannepardoe@yahoo.co.uk

Mammals - Lynsey Gedman mobile: 050 576 0383 email: lynseygedman@hotmail.com

Seashells - Andrew Childs mobile: 050 459 0112 email: andrew.childs@eim.ae

Birds - Tamsin Carlisle mobile: 050 1004702 email: tamsin.carlisle@platts.com

Spotlight and Field Clips

Al Qudra Lakes, by
Tamsin Carlisle (May, 2016)



Black-necked Swans (*Cygnus melancoryphus*)



Greater Flamingo
(*Phoenicopterus roseus*)



Black-winged
Stilt (*Himantopus
himantopus*)



Common Shelduck (*Tadornis tadornis*)

Five-Fingered Antennae

At an early morning coffee stop en route to Al-Ain, I sat my cup on the car bonnet for a moment, and noticed that a small (15mm) brown beetle had joined me there for the break. That might have been the end of it, except that modern ophthalmological technology allowed me to see that the beetle had very fine antennae that appeared to end in five long, thin fingers. These appeared to be even more elaborate than the "fingers" that I have seen on the antennae of UAE dung beetles and rhinoceros beetles.

But bionics can get you only so far, so for a quick closer look I resorted to the 'macro' setting on my camera, now more or less a standard option. Zooming the macro shot revealed that the five 'fingers' are arranged in a genuinely finger-like pattern, but instead of being cylindrical, they are flattened. And like fingers, they can be folded or flared. Thinking of the sensory power of binocular vision, or the forked tongues of snakes (which register chemical and temperature differences), one can only imagine the remote

sensing potential of this beetle's array.

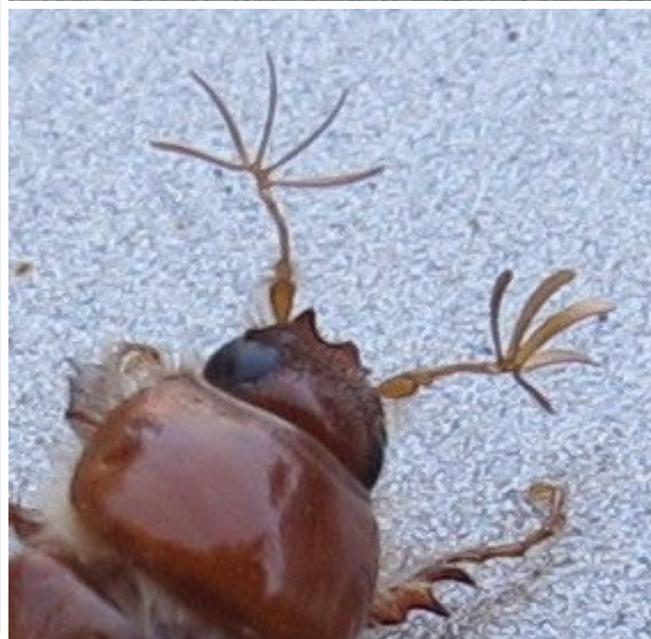
What is it? I recognized the beetle as a scarab beetle (Scarabaeoidea), which explains the similarity to dung beetles and rhinoceros beetles, and I found it to be a good match for the Arabian Chafer beetle *Phalangonyx arabicus*, as illustrated in *Insects of Eastern Arabia*. The authors, D.H. Walker & A.R. Pittaway, say of the Arabian Chafer that "town suburbs and oasis farms are the habitats most frequented. It is nocturnal and not often seen except when attracted by house lights at night."

The one that visited me was certainly out of place at the petrol station where I stopped.

[NB: *Insects of Eastern Arabia*, one of the most useful Arabian field guides, is available online at:

<http://www.enhg.org/Home/Publications/eBooks/InsectsofEasternArabia.aspx>]

Contribution by Gary Feulner
Photos: The Arabian Chafer beetle *Phalangonyx arabicus* has elaborate 5-fingered antennae.



Field Clip

(Continued from page 1)

(3) *Tribulus* – desert-loving, small to medium-sized shrubs with pinnate leaves and sometimes relatively showy yellow flowers.

Another and better known member of the Zygophyllaceae outside the UAE is the tree-sized Desert Date *Balanites aegyptiaca*, found across dry North Africa to the Levant and western Arabia. I first encountered the Desert Date as a widespread and common tree

The Desert Date *Balanites aegyptiaca* in the desert north of Timbuktu



A large Desert Date in Mushrif Park



Close-up of the branches, paired leaves and spines of the Desert Date



in the Sahel region of Mali, outside Timbuktu (one of my first

destinations in semi-retirement). It is a distinctive tree, able to grow to 4 meters and more, with paired leaves on long, drooping branches and a single long spine projecting from each leaf base. The Desert Date takes its name from its edible, roughly date-sized fruit that has (reportedly) a sweet-sour taste; I did not sample it.

The tree was obviously able to grow in rolling sand and I wondered why it did not reach Eastern Arabia, although I learned from Shahina Ghazanfar's 1992

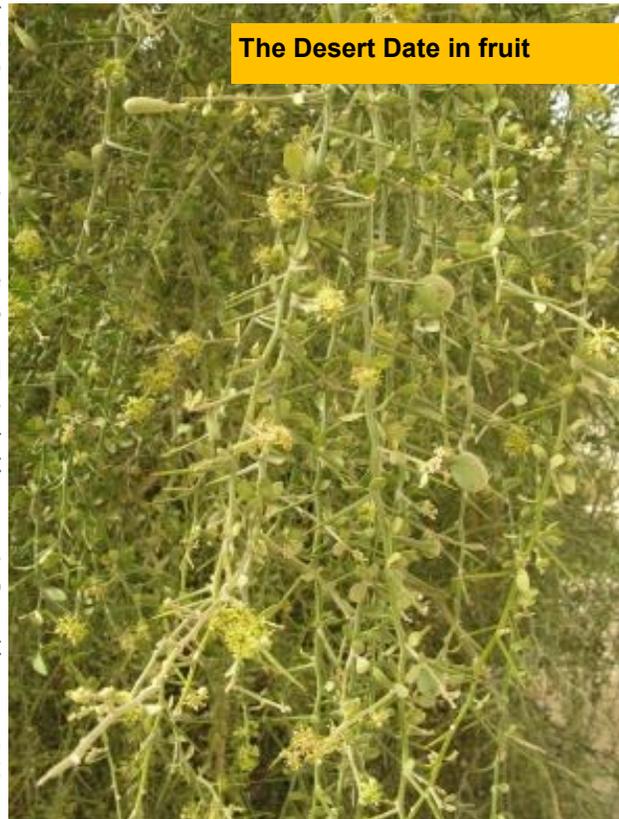
catalogue that a single tree had been recorded in Oman, at Dibab, on the coast south-east of Muscat. I have never noticed the Desert Date in plantations or parks in Dubai, so I was surprised to see a very large tree on a recent summer morning, as I was exiting Mushrif Park – on a road I have traveled many time before. Perhaps some members have seen this tree at other locations around Dubai?

Contribution by Gary Feulner

(3) A flowering *Tribulus* species in Liwa



The Desert Date in fruit



A large Desert Date at a waterhole near Timbuktu, the lower branches eaten by livestock



Field Clips

Whale Shark Spotted!

The Emmy Awards might have captured the spotlight in the entertainment industry this month but, in the marine world of Dubai, it was a whale shark *Rhincodon typus*, unassumingly stealing the limelight!

Were you one of the 22,209 (and still counting) that viewed the footage of a person *Homo sapien* enjoying a swim with a curious whale shark, just off a Jumeirah beach earlier this month? (*Time Out Dubai*, 18th September, 2016). The video went viral, as they say amongst etheric circles of the Internet.

These stately, magnificent beasts, locally known as *chanaz*, are migratory filter-feeders that happen to be the largest fish in the sea. They can grow up to 12 metres in length! However, the recent visitor was reportedly six metres long, suggesting that it was probably a juvenile. Whale sharks are sighted occasionally in the shallow waters off the Dubai coast and a quick *Google* search will reveal some accounts of these sightings.

Also relating to the film industry, an article in the *National* newspaper highlights a new documentary on the region's shark population. [Read the full article here.](#)

The article states that 'tougher measures on fishing have been introduced since making the film.' This, in itself is good news, as a field trip to the Deira fish market last year revealed a number of slaughtered sharks on display. Of particular



concern at the time was the endangered thresher shark (mainly the pelagic thresher *Alopias plagicus* and the Bigeye thresher *Alopias superciliosus*), which are seasonal visitors in Omani waters.

Arabia's Sharks: A Journey of Discovery features many sharks from this part of the world, and also stars the aforementioned 'celebrity' whale shark, though probably not the same one that was seen earlier this month. The documentary has aired once on the *Discovery Channel*, but is scheduled to broadcast a second time on *Discovery Channel HD* on October 20th. It is also being screened at a Dubai Mall cinema on 3rd October through the Emirates Diving Association (EDA) and their sponsors, although their Facebook page states that they can no longer take any further bookings, as the event is fully booked.

However, Jonathan Ali Khan, a Dubai-based wildlife filmmaker, is hoping to publish the documentary online to be made available to all.

Visit emiratesdiving.com and download their September magazine, *Divers for the Environment*, in order to gain a wider, more global awareness of the issues affecting sharks, turtles and other marine life.

Article by Margaret Swan



Thresher sharks in the market (photo: Martina Fella 2015)



Sand being pumped onto Al Bridi beach

New shelling opportunity in Fujairah

In April 2016, Gulf News reported that pictures from space showed that Dubai has expanded parts of its coastline by up to six per cent as part of development projects since 2009. Coastline development on the East coast of the UAE has also been going ahead, and it was on a recent trip to Fujairah that I noticed that many of the beaches on the East coast are now barricaded while construction work is being undertaken. This involves the creation of new breakwaters, and the development of new beach areas. As seen in the attached photos, the sand for one of the new beach areas is being pumped from the sea floor a couple of hundred metres offshore by dredgers. One beach that has been completed, and indeed one of the most

(Continued on page 6)

Field Clips

(Continued from page 5)

southerly of the beaches currently accessible to East coast shellers, is at Al Bridi between Kalba and Fujairah.

Before redevelopment, the sea used to come almost up to the road, with less than 5 metres of sandy beach. There is now more than 50 metres of sand between the road and the sea, depending on the state of the tide, and the infill sand seems to have been taken from the sea bed further offshore in front of the beach. This has resulted in patches of seashells now appearing on the beach as the tide begins to settle the new sand, which perhaps would not have been seen before, giving some good shell spotting opportunities.

I made my first (and second!) UAE finds of *Harpa ventricosa* there earlier this month, as well as some fine undamaged examples of young *Conus betulinus* and *Conus elegans*. You might also be lucky to find juvenile *Babylonia spirata*, *Semicassis faurotis*, as well as several varieties of *Naticidae* and *Turridae*. Who knows what else might be thrown up on the beach in the dredged material?

I do not know how long these



Finished beach in Al Bridi, with shells

patches of shells will last, nor whether the current developments at Al Qadsia and Hitein will result in similar areas appearing on the other beaches being constructed. Perhaps this will be a short-lived opportunity.

Contribution by Andrew Childs (September, 2016)

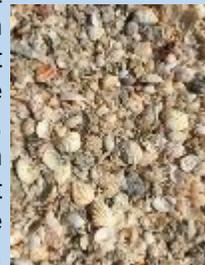
Groynes and Shells

On visiting a beach at Umm Suqeim in April, I walked towards one of the groynes that were constructed between 2014/15 ([read more about the construction of these groynes here](#)). At

Shells found near the groyne



the shoreline an assortment of shells were found which were larger and indeed, more varied, than the shells that are normally seen not much further up the coast in Jumeirah 3. Curious to find out more, and whether the groynes were the reason for the larger shells, thoughts pondered on the beach itself, which seemed to be further out to sea compared to others in the vicinity. This posed a few questions.



Is it possible for older/larger shells to be washed up in the swash—or is there a different reason for these beached shells? Perhaps offshore construction projects have affected the way these shells are washed up?

The oysters in the photograph below left, for example, were deposited in abundance next to a groyne in Wales, where the records state that the oysters appeared from rocks further out at sea.



© Creative Commons

I found [this informative video](#) by Professor Simon Haslett, which explains in simple terms, how the longshore drift washes away the sand and the effect that groynes have to avoid this erosion.

I then wondered what an aerial view of the coastline would look like and found [the blog by Tim Peake](#), a British astronaut. Peake landed on *terra firma* in June this year, after spending six months working on the International Space Station. The photograph below is of the 'Dragon,' photobombing the amazing view of Dubai. To view this in a higher resolution, click on the above blog link, and then click again on the coastline to magnify further.

Zooming in on the blog photo, I can make out five little bumps on the coastline, which I believe to be the groynes, opposite some of the 'World' islands.

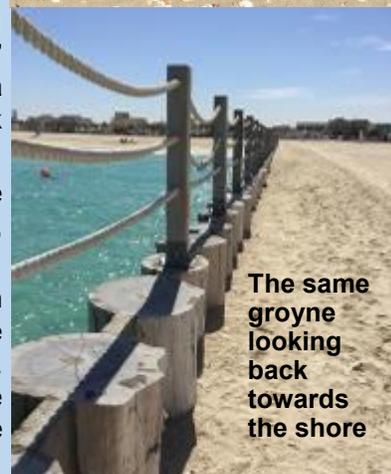
Alas, there is neither the space nor the time (no pun intended) in this short article to discuss all of the above questions in full, as many factors need to be considered. Time of year, tides, currents and position of the moon are but a random few. Food for thought for a budding marine researcher, perhaps.

Contribution by Margaret Swan

©Tim Peake (click the above 'blog' link for a larger view)



Groyne looking out to sea



The same groyne looking back towards the shore

Shell collectors note that signs on these public beaches state:

'No fishing or collecting of shells'

However, photographs can record your finds. Remember to put something down beside them for scale, such as a coin—and let us know how you get on!

Field Clip

Phalaenopsis or 'Moth' Orchids

Originating from Southern China, India, Southeast Asia and Northern Australia the Phalaenopsis is one of the most well-known and popular orchids in the horticultural trade, available in supermarkets and garden centers around the world. In the wild, this orchid genus consists of around 60 species. However, as it is easy to grow there are now hybrids of all sorts of colors and shapes, ranging from simple and elegant white flowers, to pink, purple and even yellow. Some are solid colored, some spotted and others have a kind of net pattern.



Many of you will have received or bought a Phalaenopsis at some stage. They usually flower for many weeks or even months. But what to do with the plant once the flowers are gone? How should one take care of a Phalaenopsis in order to enjoy it for many years?

First of all one should be aware of the fact that this species is an epiphyte. This means it grows on trees and not in soil like other plants, but it is not a parasite; the host is



used primarily for support. Epiphytic plants use photosynthesis for energy and obtain moisture from the air or from dampness (rain and cloud moisture) on the surface of their hosts. Roots may develop primarily for attachment.

What does this mean with regard to caring for a Phalaenopsis at home? Here are some do's and don'ts:

1. You might notice that when you buy such an orchid it is usually planted in a see-through plastic pot filled with pieces of tree bark. In nature, Phalaenopsis grow on trees and absorb moisture with their roots, which are often attached to the tree bark. Therefore never plant a Phalaenopsis in regular potting soil. Keep it in a transparent flower pot. The roots should be exposed to natural daylight as they also perform photosynthesis.

2. In nature, the Phalaenopsis lives on very little nutrition. Unlike other plants it does not have the means to obtain salts and other nutrition from the soil. Therefore never ever fertilize your orchid

with regular plant fertilizer. This overdose would kill the plant.

3. Growing on trees, moisture can only be absorbed through rain and air moisture. This means that the plant is able to survive short dry periods.

In case of rainfall, the roots will quickly absorb the available moisture. In order to imitate these conditions at home, you should never water your Phalaenopsis like an ordinary plant. Stagnant

moisture has to be avoided by all means as the delicate plant roots would soon rot. Dip your plant once a week for a few hours in a bucket of tap or rain water. Make sure the water is room temperature. Then take it out and drain. When the orchid is flowering you can do it some good by adding a little special orchid fertilizer to the water in the bucket.

4. Once it is finished flowering the orchid needs a period of rest. This means less watering and no fertilizing. Once all the flowers have died off, the remaining flower stalks can be cut off.

5. The big question is now how to make the Orchid produce flowers again after its rest period of 2-3 months.

Usually by July/August all flowers will have died off. I then cut off the stalks and keep the plants in a bright but not sunny place inside the air-conditioned house. (I have tried to keep them out in the garden under some trees, but the soaring Dubai summer temperatures proved to be too much for these tropical plants).

After the summer, in late October or early November when the temperatures in the UAE have dropped, I place them in a shady spot under a tree and sprinkle them with water whenever I water the lawn. If you do not have a garden, you can do the same in a shady corner of your balcony. In order to produce new flowers, the Phalaenopsis needs relatively low temperatures for several weeks. The chilly nights of December and January will trigger the production of new

flowers once the temperatures are on the rise again. Once you spot the first flower stalks growing out of the large fleshy leaves you can also start to fertilize again in moderation.

I have had my two Phalaenopsis for at least 7—8 years now. Every year they seem to produce more flowers. Once one understands the special requirements of these beautiful orchids they will prove really hardy and long lasting. They can be enjoyed for years on end, and by no means do

they need to be thrown into the bin after they first finish flowering.



My Phalaenopsis for example start flowering each year in spring time.

Contribution by Martina Fella

Dubai Natural History Group Programme

Lectures at Emirates Academy of Hospitality Management, 7.30 for 8.00pm

October 9:	Andrew Childs and Vicky Dobson—Shell we? Oh yes, let's! Collecting seashells in UAE and Oman - from whim to passion over three years.
November 6:	Jacky Judas—doing a Ph.D. on peccaries in French Guyana.
December 11:	Members' Night.

Field trips will be circulated to members via e-mail

Scheduled Field Trips (Members only)

December 16—23:	Northern Vietnam
-----------------	------------------

DNHG COMMITTEE 2016

When possible, please contact committee members outside office hours

	Name	tel	email
Chairman	Gary Feulner	04 3065570	grfeulner@gmail.com
Vice Chairman	Valerie Chalmers	050 455 8498	valeriechalmers@gmail.com
Treasurer	Rakesh Rungta	050 774 4273	rakeshrungta10@gmail.com
Membership Secretary	Anindita Radhakrishna	050 656 9165	anin@emirates.net.ae
Speaker Co-ordinator	Martina Fella	050 358 6485	martina_fella@hotmail.com
Speaker Co-ordinator	Michelle Sinclair	050 458 6079	sinclairm2004@yahoo.com
Fieldtrip Co-ordinator	Sonja Lavrenčič	050 256 1496	lavson@gmail.com
Member-at-Large	Pradeep Radhakrishna	050 450 8496	wgarnet@eim.ae
Newsletter Editor	Margaret Swan	050 7984108	gazelleeditor@gmail.com
Librarian/Book Sales	Johanna Raynor	055 604 2575	jorayoman@gmail.com
Postmaster	Sandi Ellis	050 644 2682	sandiellis@gmail.com
Chief Engineer	Ajmal Hasan	056 5047006	ajmal_hasan@hotmail.com
Website Co-ordinator	Sandhya Prakash	050 551 2481	sandy_pi@yahoo.com
Greeter at meetings	Helga Meyer	055 821 7266	willyroaming@gmail.com

Postal Address: DNHG, PO Box 9234, Dubai, UAE

DNHG Membership

Membership remains one of Dubai's best bargains at Dh100 for families and Dh50 for singles. Membership is valid from September 2016 to September 2017. You can join or renew at meetings or by sending us a cheque made out to HSBC account number 030100242001. (Please note we cannot cash cheques made out to the DNHG).

Payment can also be made by cash deposit at a bank or ATM, using our IBAN number AE900200000030 100242001. However, this process does not identify you as the payer. If you wish to pay by cash, please also photograph or scan a copy of your payment confirmation and send via e-mail to the Membership Secretary, so we know whose money we have received.

DNHG membership entitles you to participate in field trips and help pay for our lecture hall, publication and distribution of our monthly newsletter, the *Gazelle*, our post office box, additions to our library, incidental expenses of speakers and occasional special projects.

WANTED!

Speakers for
Members' Night
11 December
(see page 2)