



# Beekeepers Association of the ACT

PO Box 1482, Woden, ACT, 2606

Newsletter of the Beekeepers Association of the ACT Incorporated

Website: [www.actbeekeepers.asn.au](http://www.actbeekeepers.asn.au)

Meetings of the Beekeepers Association of the ACT Inc are held on the second Thursday of the month at 7.30 pm at the CIT, Heysen Street, Weston in Building A

Contact: Association President – Dave Alden Ph: 62826908

Email: [enquiries@actbeekeepers.asn.au](mailto:enquiries@actbeekeepers.asn.au)

## May 2006

---

### Meeting

Our next meeting will be held on Thursday 11th May at 7.30pm, at CIT Weston. The guest speaker will be Dr Carolyn Hawkins who is a Clinical Immunologist at The Canberra Hospital and a lecturer at the Australian National University. Dr Hawkins will speak about Bee Stings and the Immune Response.

As usual the meeting will begin with *Beeginner's Corner*, sharing beekeeping news and questions and the speaker will speak from about 7.45pm. There will be supper and time to chat after the meeting.

### President's Note:

The last meeting was one I certainly should not have missed. The guest speaker was none other than our renowned mead-maker, Dick Johnston. Dick ran through the basics of mead making with others from the audience with brewing experience adding their tips. Thanks to Dick and all those that made the meeting an enjoyable one. I understand that the samples were very well received by many! I expect that the chill that is now in the evening Canberra night air will encourage many of us in the Association to try our hands at mead-making. So, here's a warning for the judges of the mead class at next year's show, you'll have a lot more tasting to do - yum!

*Dave Alden*



### 2006 Conference NSW Apiarists Association

The NSW Apiarists Association Annual Conference will take place on 24th-25th May at Forster. There will be an informal evening on Wednesday 24th May at the Forster-Tuncurry Memorial Services club during which Joe Traynor will do a small presentation. The conference concludes with the Annual Dinner at the Forster RSL Club on Friday 26<sup>th</sup> May.

Speakers at the conference include Joe Traynor, a highly qualified expert in almond pollination from California; Dr Leigh Nind, Senior Veterinary Officer with Biosecurity Australia; Dr Shona Blair and Julie Irish, researchers into the therapeutic potential of honey at the University of Sydney; and Dr Michael Hornitzky, Bruce White, John Rhodes, and Doug Somerville from NSW DPI.

Pre-registration conference fees are \$75 members and \$85 non-members. Registration fees on Conference day are \$85 members and \$95 non-members. An accompanying spouse is \$25 extra. Conference dinner is \$40 per head for a carvery smorgasbord. Pre-registration helps with administration and should be sent to the Secretary, Julie Lockhart, by 16<sup>th</sup> May. Address your pre-registration to Julie Lockhart PO Box 3018 Toongabbie East 2146.

We do not have copies of pre-registration forms so please include your name, address, phone number, email, your conference fee, accompanying spouse \$25 extra if applicable, dinner \$40 per head if applicable, NSW Apiarists Association membership number if applicable, other organisation/membership number. Payment can be made by cheque, Bankcard, Visa, or Mastercard. Include your card number, the expiry date and total amount and sign the paper.

If you would like more information contact David Lillis on 0413426290. David has attended many conferences over the years and has always found them very interesting.

## Lose Weight By Eating Honey?

On January 1st 2006 a book was published by Souvenir Press (London), called The Hibernation Diet. The book, which advocates taking honey before bed to optimise fat loss during sleep, is already causing unprecedented levels of interest from the media prior to publication.

This information has leaked out into the athletic community nationally and has already impacted on honey sales nationally in 2005. In January 2005, a few articles in the press about this approach to weight loss, before the book was written, caused some supermarkets in Scotland to have their shelves cleared of honey.

The book arose out of the authors' work in sports nutrition, whereby they have been advising athletes for some years to take honey prior to bed to optimise recovery. Recovery biology is exclusively fat burning biology and arising from this, the authors developed a strategy for optimising fat burning during sleep by fuelling the liver prior to bed, culminating in the book (The Hibernation Diet). Honey, which contains fructose, is ideal for this purpose.

If the liver is fuelled prior to bed recovery hormones are released to do repair, regeneration and construction of new tissue. These hormones are exclusively fat burning hormones. For this to occur, blood glucose must be stable, and for this to occur, the liver must be fuelled prior to bed.

Up to now, few do this, the liver depletes, blood glucose falls and adrenal stress hormones, which do not burn fat are released.

The book is based on several years of research into recovery biology and although the theory and the biological principles it utilises are quite simple, they have been ignored up to now, not only by the medical profession, but also by those who offer advice to would-be dieters.

As authors of the book we very much want the book to be discussed at every level within the honey industry, so that a mutually beneficial dynamic may develop whereby sales of the book drive forward sales of honey and sales of honey drive forward sales of the book.

*Mike and Stuart McInnes (authors) Hibernation Diet.*

*The authors may be contacted on 0131 622 5101 or 0141 847 0565*

*or [info@hibernationdiet.com](mailto:info@hibernationdiet.com)*

*Souvenir Press Ltd*

*43 Great Russell Street*

*London WC1B 3PB*

*020 7580 9307*

## Can Your Bees Recognise You?

Honeybees may look pretty much all alike to us. But it seems we may not look all alike to them. A study has found that they can learn to recognize human faces in photos, and remember them for at least two days. The findings toss new uncertainty into a long-studied question that some scientists considered largely settled, the researchers say: how humans themselves recognize faces. The results also may help lead to better face-recognition software, developed through study of the insect brain, the scientists added.

Many researchers traditionally believed facial recognition required a large brain, and possibly a specialized area of that organ dedicated to processing face information. The bee finding casts doubt on that, said Adrian G. Dyer, the lead researcher in the study. He recalls that when he made the discovery, it startled him so much that he called out to a colleague, telling her to come quickly because "no one's going to believe it—and bring a camera!"

Dyer said that to his knowledge, the finding is the first time an invertebrate has shown ability to recognize faces of other species. But not all bees were up to the task: some flunked it, he said, although this seemed due more to a failure to grasp how the experiment worked than to poor facial recognition specifically.

In the bee study, reported in the Dec. 15 issue of the Journal of Experimental Biology, Dyer and two colleagues presented honeybees with photos of human faces taken from a standard human psychology test. The photos had similar lighting, background colors and sizes and included only the face and neck to avoid having the insects make judgments based on the clothing. In some cases, the people in the pictures themselves looked similar.

The researchers, with Johannes Gutenberg University in Mainz, Germany, tried to train the bees to realize that a photo of one man had a drop of a sugary liquid next to it. Different photos came with a drop of bitter liquid instead. A few bees apparently failed to realize that they should pay attention to the photos at all. But five bees learned to fly toward the photo horizontally in such a way that they could get a good look at it, Dyer reported. In fact, these bees tended to hover a few centimeters in front of the image for a while before deciding where to land. The bees learned to distinguish the correct face from the wrong one with better than 80 percent accuracy, even when the faces were similar, and regardless of where the photos were placed, the researchers found. Also, just like humans, the bees performed worse when the faces were flipped upside-down.

"This is evidence that face recognition requires neither a specialised neuronal [brain] circuitry nor a fundamentally advanced nervous system," the researchers wrote, noting that the test they used was one for which even humans have some difficulty. Moreover, "Two bees tested two

days after the initial training retained the information in long-term memory,” they wrote. One scored about 94 percent on the first day and 79 percent two days later; the second bee’s score dropped from about 87 to 76 percent during the same time frame.

The researchers also checked whether bees performed better for faces that humans judged as being more different. This seemed to be the case, they found, but the result didn’t reach statistical significance. The bees probably don’t understand what a human face is, Dyer said in an email. “To the bees the faces were spatial patterns (or strange looking flowers),” he added.

Bees are famous for their pattern-recognition abilities, which scientists believe evolved in order to discriminate among flowers. As social insects, they can also tell apart their hive-mates. But the new study shows that they can recognize human faces better than some humans can—with one-ten thousandth of the brain cells.

This raises the question of how bees recognize faces, and if so, whether they do it differently from the way we do it, Dyer and colleagues wrote. Studies suggest small children recognize faces by picking out specific features that are easy to recognize, whereas adults see the interrelationships among facial features. Bees seem to show aspects of both strategies depending on the study, the researchers added.

The findings cast doubt on the belief among some researchers that the human brain has a specialized area for face recognition, Dyer and colleagues said. Neuroscientists point to an area called the fusiform gyrus, which tends to show increased activity during face-viewing, as serving this purpose. But the bee finding suggests “the human brain may not need to have a visual area specific for the recognition of faces,” Dyer and colleagues wrote. That may be helpful to researchers who develop face-recognition technologies to be used for security at airports and other locations, Dyer noted. The United States is investing heavily in such systems, but they still make many mistakes.

Already, the way that bees navigate is being used to design “autonomous aircraft that can fly in remote areas without the need for radio contact or satellite navigation,” Dyer wrote in the email. “We show that the miniature

brain can definitely recognize faces, and if in the future we can work out the mechanisms by which this is achieved,” this might suggest ideas for improved face recognition technologies.

Dyer said that if bees can learn to recognize humans in photos, then they reasonably might also be able to recognize real-life faces. On the other hand, he remarked, this probably isn’t the explanation for an adage popular in some parts of the world—that you shouldn’t kill a bee because its nestmates will remember and come after you.

*Reprinted from Apis UK, an online newsletter which can be accessed at <http://www.beedata.com/apis-uk> Other topics this month include the effects of Varroa on Clover production in NZ, a new antibiotic for treating AFB in the USA. And HMF, is (a compound that results from the breakdown of glucose or fructose) levels in honey and the effects of heating.*

## Tool of the Month

The tool of the month for May is a simple home-made device for pinning down a queen while you mark her with white-out. A piece of wire is shaped into a Y-shape and a thin rubber band stretched lightly between the arms of the Y. When the queen is located lay the frame on top of the hive and pin down the queen by placing the rubber band across her between thorax and abdomen. She is unable to get free but is held reasonably still for marking. It pays to have your white-out opened and ready as holding down the queen while opening the jar requires more than one pair of hands. Since we began using this tool we have not had queens with wings stuck to their back or white-out in their faces and eyes.



**Bindaree**  
bee supplies

- Starter Kits
- Protective Clothing for Adults and Kids
- Bee Keeping Equipment
- Gift Vouchers
- Free Catalogue Available

PO Box 3015 Murrumbateman, NSW 2582 Phone: 02 6226 8866 Fax: 02 6226 8824  
[www.bindaree.com.au](http://www.bindaree.com.au)