

## The Appliance Of Science

## Happy Birthday - The Journal of Apicultural Research is 50

Norman Carreck NDB

The latest issue, 50(4) of the *Journal of Apicultural Research* (*JAR*) includes a review paper (Carreck, 2011) which records something of the journal's history, and highlights some of the most important contributions to bee science recorded in its pages over the last fifty years. For a journal published by a small independent charity like IBRA to reach fifty years of continuous publication is a great achievement in an era when most scientific journals are published by large corporations who have hundreds of titles.

The origins of *JAR* can be traced back to the birth of *Bee World (BW)* itself in 1919, founded and published by the Apis Club, which in many ways was a predecessor to IBRA. The history of *BW* is complex, but from its earliest days, amongst the practical articles on beekeeping, details of meetings and transactions of beekeeping associations, acrimonious correspondence and lightweight ephemera, there were serious scientific articles about bees (Showler, 2010). This inclusion of serious scientific articles continued, especially after publication of *BW* was taken over by the newly formed Bee Research Association (BRA) in 1949 under the editorship of its founding Director Dr Eva Crane.

It became clear, however, that there was a need for a separate peer-reviewed scientific journal to publish research on all aspects of the study of all species of bee. *Bee World* did not have the space to publish sufficient articles and there was a reluctance of some scientists to publish in a journal with such an "unscientific" name. The *Journal of Apicultural Research* was thus founded in 1962 under the editorship of Dr Crane to satisfy these needs.

Since then it has published papers making an important contribution to our knowledge of a wide range of topics. These range from studies of bee biology such as the swarming behaviour of bees, to the properties of hive products such as honey, beeswax and propolis. Throughout its history, many papers have reported research on honey bee pests and diseases. For example, the first ever report

that the parasitic mite Varroa could become a pest of the European honey bee was published in *JAR* in 1963. More recent papers have made a major contribution to our understanding of the international problem of honey bee colony losses.

In those early days, for many reasons, both political and cultural, it was difficult for scientists in the developing world and Eastern Europe to have papers published in English language scientific journals. The first issue of *JAR* included a paper on the hatchability of "lethal eggs" in honey bees (Woyke, 1962) by Prof. Jerzy Woyke of the Warsaw University of Life Sciences, Poland. Since that time Prof. Woyke has published a total of 68 papers in *JAR*, and 2010 marked the 60<sup>th</sup> year of his scientific publishing. The latest issue of *JAR* includes another important paper from Prof Woyke (Woyke, 2011), and, in recognition of his outstanding contribution to bee science, IBRA Council has now conferred Honorary Membership upon him (see IBRA News).



JAR founder Editor, Dr Eva Crane with (on left) Prof. Jerzy Woyke. Another regular JAR contributor Prof. Lionel Gonçalves (Universidade de São Paulo, Brazil) is in background.

Photo: R Jones

For many years JAR authors would receive postcards from around the world requesting paper reprints of their articles, an indication that somebody in the scientific community was actually reading their work, which would then hopefully be used to prompt further research. The advent of electronic communication and databases has, however, made it much easier to follow this process, as the number of times a paper has been cited in subsequent published studies is now very easy to track. We can see, for example, that of 1,344 papers published in JAR between 1976 and 2011, 623 (46%) have been cited more than five times and 55 (4%) have been cited more than 30 times. In contrast to papers in fast moving fields such as molecular biology, where work may become quickly superseded, papers published in JAR usually have a very long "half-life", and remain relevant for many years.

In recent years, the scientific publishing world has changed beyond recognition from that which existed in 1962. In those early days of *JAR*, everything was either written out by hand or typed on mechanical typewriters. Manuscripts were submitted in multiple copies produced with carbon paper and were sent to referees using the postal service. It was a very lengthy process. Diagrams were drawn by hand with the aid of graph paper, tracing paper, stencils, Rotring® ink pens and Letraset® lettering, and then transferred to lead or copper printing blocks. Final copy was laid out by hand, literally using the "cut and paste" process. Finally, authors were sent paper "reprints" of their papers.

The adoption of computers, word processors, electronic mail and especially the worldwide web, has totally revolutionised the publishing process. Papers are now submitted electronically from around the world, and just as rapidly dispatched to referees. Should a referee not respond, the paper can easily be sent to another. Papers can be typeset electronically using files sent directly from a word processing package to a desk top publishing package. *JAR* has moved with the times. From Volume 48 in 2009, the journal has been typeset entirely in-house on Microsoft Publisher® software, and catalogued using the Digital Object Identifier (DOI) system. From Volume 49 in 2010, *JAR* became a digital only journal, accessed via the IBRA website, although still available as hard copy by special request and at additional cost.

The current Guidelines for Authors states that JAR:

"publishes original research articles, original theoretical papers, notes, comments and authoritative reviews on scientific aspects of the biology, ecology, natural history and culture of all types of bees (superfamily Apoidea) including honey bees, bumble bees, stingless bees and solitary bees"

a mission little changed from that of Volume 1, but we now live in a very different world from that of 1962. Who can say how scientific publishing may change over the next fifty years?

The history of *JAR* mirrors the history of some of the most exciting and fruitful decades in bee science. This surge of accumulating knowledge shows no sign of slowing, and IBRA and its journals plan to be there, adapting to new publishing technologies, documenting the ongoing story of bee science, and advocating the highest standards of scientific practice and reporting. IBRA Council Member Dr Peter Neumann has recently commented that with the current interest in bees we are enjoying a "golden age of bee science" with many important papers being written, and *JAR* is therefore very fortunate that it has attracted, and still receives, a great many excellent papers for consideration. Let us hope that this continues over the next fifty years of *JAR*.

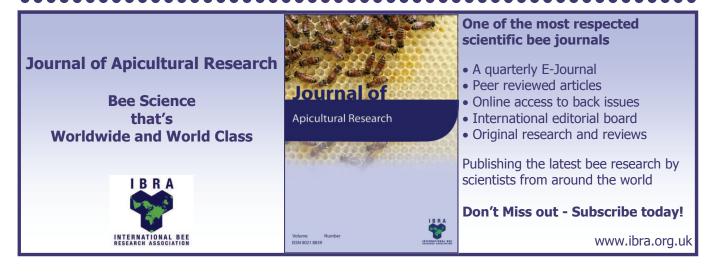
## References

Carreck, N L (2011) Fifty years of the *Journal of Apicultural Research*. *Journal of Apicultural Research* 50(4): 249-256. DOI: 10.3896/IBRA.1.50.4.01

Showler, T J K (2010) *Bee World* - a phoenix arises. The evolution of a beekeeping journal. *Bee World* 87(1):

Woyke, J (1962) The hatchability of 'lethal' eggs in a two sex-allele fraternity of honey bees. *Journal of Apicultural Research* 1: 6-13.

Woyke, J (2011) The mating sign of queen bees originates from two drones and the multiple mating in honey bees. *Journal of Apicultural Research* 50(4): 272-283. DOI: 10.3896/IBRA.1.50.4.04



www.ibra.org.uk December 2011 | Bee World | 83