



# Guppy Club of Great Britain

## Guppy Club Of Great Britain Mission Statement.

The focus of the organisation is to build and maintain a working relationship with other IKGH Guppy breeders both in the UK and abroad. To grow the organisation with in the UK and attract breeders to Show Guppies at the IKGH European Championships.

### GCOGB .

New free on line Facebook.  
Group for Guppy Breeders.  
Visit web site.

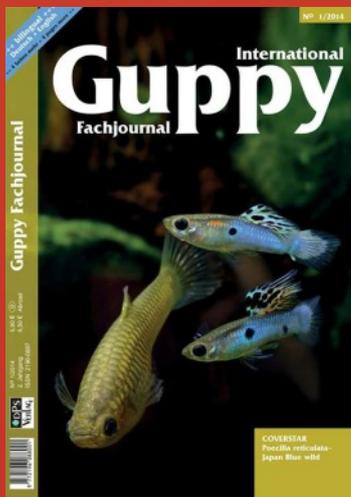


### Full IKGH Dates 2014

2014 EC Pair's & Trio Championship Dates  
are now available on line  
[www.ikgh.org](http://www.ikgh.org)

### International Guppy Fachjournal

Out Soon. Contact Carl:  
[carlstew80@hotmail.com](mailto:carlstew80@hotmail.com).



### GCO-GB Newsletter

Issue: Number 1

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## Guppy Breeders Show Great Interest in K1 Filters.

### K1 Moving Bed Filter.

#### From Facebook to YouTube.

Guppy breeders World wide have set too making DIY K1 moving bed filters. These filters are not a new Idea moving bed filters have been around for some time normally used in commercial filtration and large pond set ups.

Developed by Professor Halvard Odegaard at Trondheim University of Science and Technology the Kaldnes Moving Bed bio film process has been designed specifically to create the most effective environment for the nitrification process to take place.

The media is engineered in a wheel shape and is slightly positively buoyant, allowing a small amount of water flow (created by adding air to the process) to circulate the media throughout the vessel.

Oxygen and food (ammonia and nitrite) gives the bacteria the means to grow, whilst the Kaldnes media provides maximum surface area for the bacteria to colonise and produce bio film. It is this process, which removes harmful ammonia and nitrite from the water. As the Kaldnes media chaotically circulates within the bio tank, it causes old dead bacteria/bio film on the outside, to be removed making space for new younger heavier feeding bacteria/bio films to colonise.

Within the wheel, is a protected surface, which enables colonies of bacteria to naturally follow their life cycle, maturing and dying, in turn fuelling the latter stages of the nitrification conversion process. It also assists in the breakdown of any small particles passing through from the mechanical stage. Therefore, the Kaldnes media maintains both a young bio film and a maturing bio film providing a

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Is now entering its fourth year of existence. 2014. Offers opportunity for Guppy Breeders to expand their interest in the IKGH European Show Circuit.

more consistent filter performance, whilst improving water quality, encouraging healthier guppies.

Due to chaotic movement of the Kaldnes K1 media, the process is self-cleaning and requires little maintenance. This allows the filter to reach optimum effectiveness without the disturbance of periodic maintenance, avoiding unnecessary loss of bacteria within the filter preventing high levels of ammonia and nitrite within the water.

This type of bio media which is reputed to be 10 times more efficient than matting and lowers Nitrate and Ammonia.

### DIY Internal Moving Bed Filter.



This is not to difficult to make and there are much easier and cheaper models designs available on both YouTube & Facebook.

Happy New Year.

To all Guppy Breeders both here in the UK and our friends abroad.