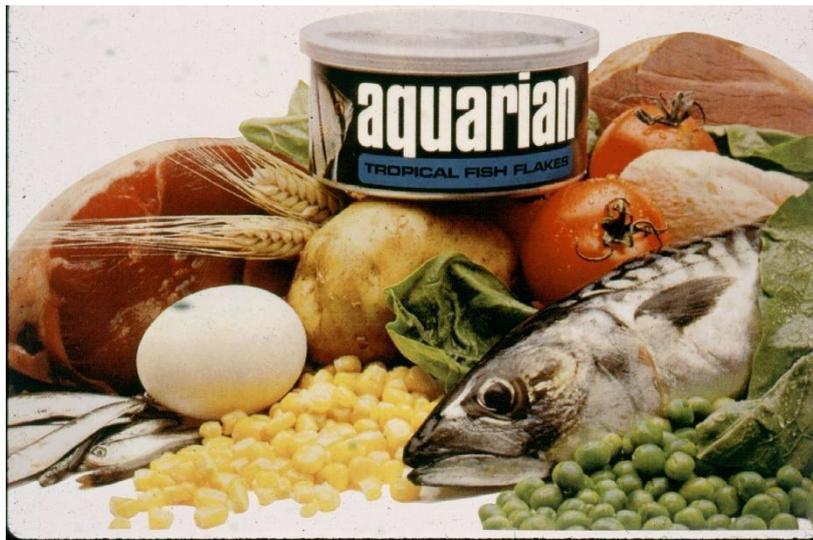


## *The* **AQUARIAN** *Story*

The first 30 years of a Mars product



Part 1 – Birth of **AQUARIAN**

Part 2 – The **AQUARIAN** Advisory  
Service

Part 3 – **AQUARIAN** Equipment

Part 4 – Waltham Aquacentre

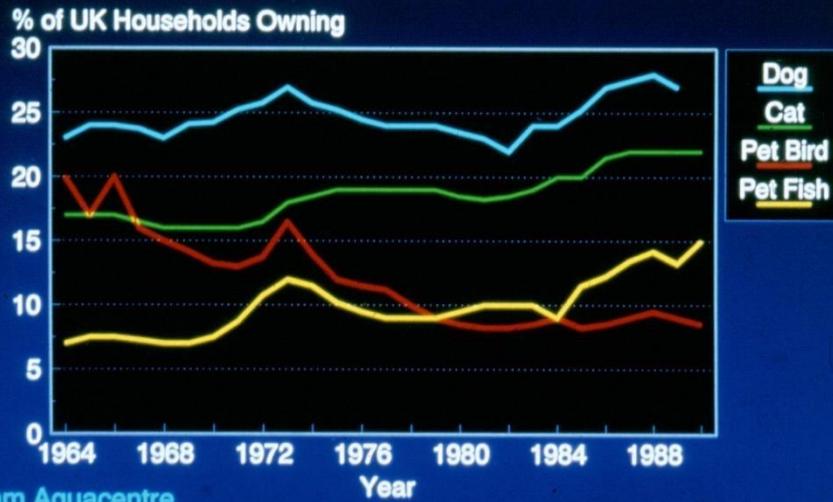
Appendix 1 – Publications  
Appendix 2 – Early Labels

Appendix 3 – to 40 years....

*The* AQUARIAN *Story*

## Part 1 – Birth of **AQUARIAN**

## Pet Ownership In The UK Percentage of Total Household



Back in the 1970s Pedigree Petfoods noted that the budgie population was decreasing at the same rate as pet fish popularity was rising. So, Mars HQ decided to add a fish food to their pet diet range of dog, cat, budgie and wild bird foods.

Initially they sought to acquire Tetra, the German fish food range,

but Tetra GmbH placed such a high value on their company that negotiations failed. Hence Mr Forest Mars Senior stated, 'If we can't join them, beat them' and instructions were given to choose two Product Development associates to develop a fish food.

These were Dr David Ford of Pedigree Petfoods, Melton Mowbray, England and Hr Rudi Barz of EFFEM, Verden, Germany.

Rudi was a Zone 3 at EFFEM and was given a budget to build a fish laboratory in Verden town where several large aquaria were installed to test experimental mixes prepared by the EFFEM R&D associates. Rudi knew nothing about petfish but was skilled in man-management and so was able to quickly develop a

copy of the Tetra Fish Food.  
Comparative feeding of Tetra versus  
the EFFEM equivalent started in the  
German Fish-house in 1973.



Dr David Ford was chosen because  
he was a devoted aquarist having  
kept petfish for 30 years, even  
looking after Tropical Marine aquaria  
show tanks at the entrance to  
Pedigree Petfoods Ltd at the Melton  
Mowbray plant. He had also worked

in Product Development since the 1960s, developing products such as Mick, Bounce, Lassie Meaty Chunks, Pet-o-steaks, Whiskas Rabbit, Dine, Faithful and developed new recipes for PAL and Trill plus research into low volume diets, even a petfish retailing system.

David has a Doctorate in the physical chemistry of aqueous systems and a degree in food science, so he was an ideal choice for the project. It was given the research number S60 (S for special...and the 60<sup>th</sup> one investigated by Product Development).

David's approach was quite different to EFFEM. Mr Mars told him that 'a food superior to all others on the market is required, with that

superiority proven by laboratory controlled trials'. So David toured the World's top aquarium units, from the Florida fishfarms to the Berlin Aquarium collecting information and examples of commercial fish foods. These were analysed by Pedigree Petfoods QA laboratory.

The results showed that all the popular diets were made by dry product technology where meals (meat, fish, bone, vegetable meals) were blended and formed into flakes, granules, sticks or pellets with binding agents, mainly gelatine.

In the factory at Melton Mowbray there were tons of fresh fish and meat being processed into dog and cat foods, so David decided to use this raw material to process directly

into a fish food. Bypassing the 'meal' stage should give superior nutrition and palatability.



Mixes prepared for Lassie, Pal and Chum were meaty and mixes for Kit-E-Kat and Whiskas were fishbased (this was the 1970s) so samples of the blends were taken into the laboratory and dried in various ways to give a fish food with

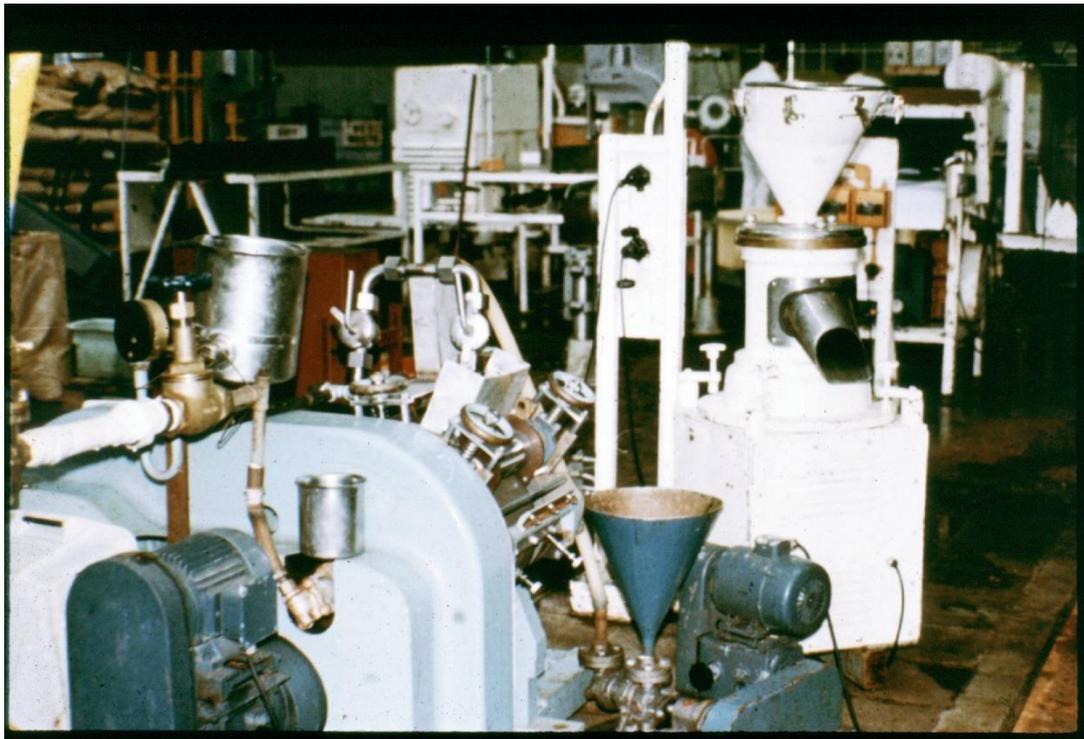
less than 4% moisture levels for good shelf-life.

Granules, sticks and pellets were produced with traditional extruder equipment and oven dried. The best product, however, was achieved with a non-stick frying pan and a wallpaper roller.

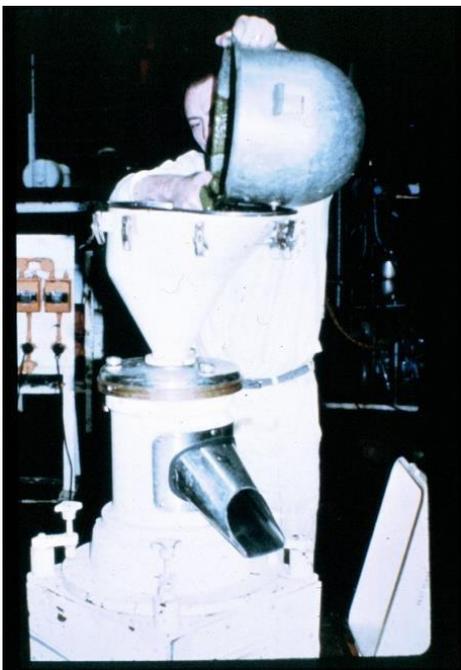
Blends of cat and dog food mixes (before canning) were homogenised and spread onto a hot pan surface with the roller, where the proteins coagulated to give a thin cohesive sheet. This meant gelling agents such as gelatine were not needed. The sheet crumbled to give a traditional 'flaked fish food' which David's fish (at his home) ate with obvious relish.

The other structures were not as attractive or taken so well by a range of pet fish. It was therefore decided to develop a flaked format. Although this was not novel, it was a tried and tested format and the use of fresh raw materials should give better acceptance.

A pilot plant production line was therefore set-up to make experimental mixes.

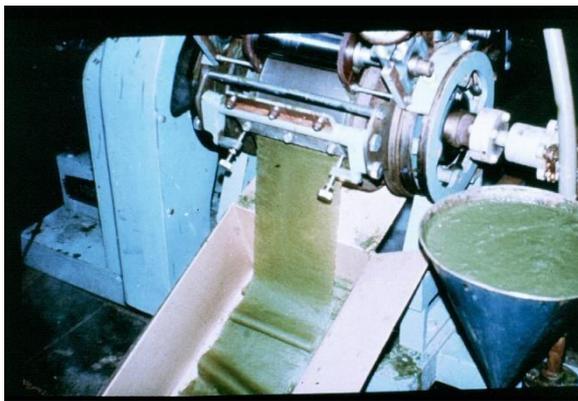


In the foreground is a rotary drum dryer chosen for surface drying of emulsified food mixes. At the rear is a grinder that can handle the mixes, even emulsifying fish bones.



Foods were blended in a Hobart Bowl and the mixture added to the emulsifier, which reduced the mix to a flowing paste.

The example shown was a blend of peas (Yorkshire Mushy Peas) to prepare a flake suitable for herbivorous fishes. Similar mixes were made with meat from the dog food blends and fish from the cat food blends taken from the factory production lines.



The food pastes were poured into the funnel and from there pumped at a controlled rate onto the steamheated roller drier. This flashcooked the proteins to give a paperlike texture, just as occurred with the frying pan and wallpaper

roller trials. The vegetable and meaty mixes are shown.

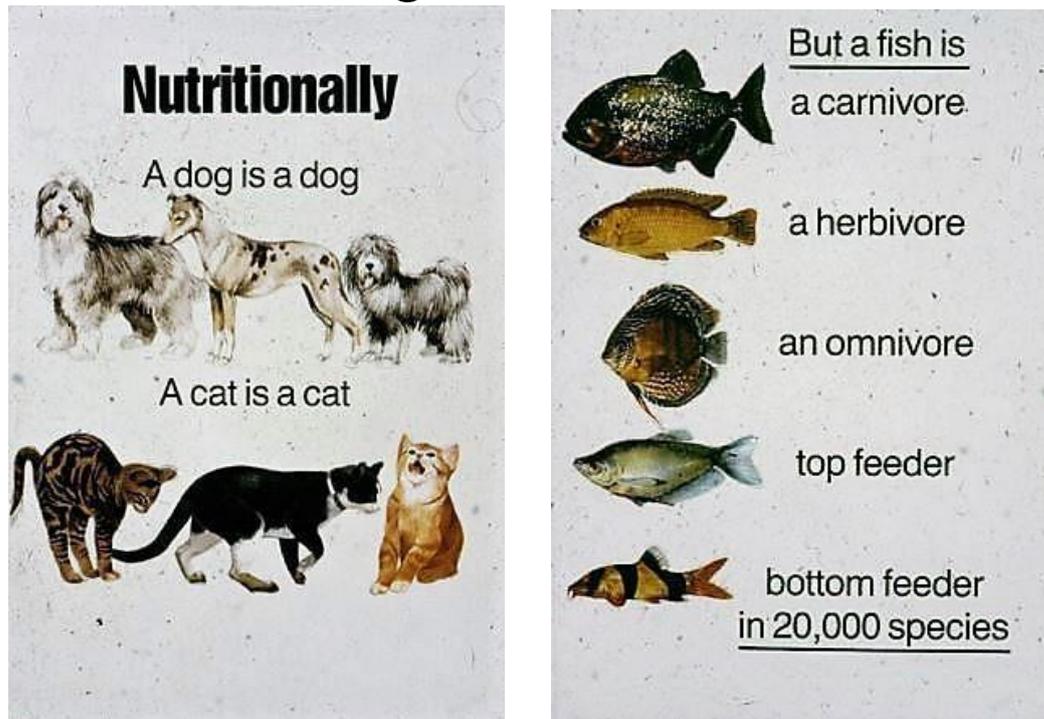
The sheets were collected by folding on to trays and then taken for cutting into a suitable shape for fish feeding.

Petfoods engineers designed a small roller device which could take a sheet of the food and press it against a roller-cutter with different designs. A square cutter is shown, but there were circles, squares, diamonds and hexagons. The final choice was a diamond shape of a size suitable for feeding by hand to the petfish.



It was realised that, unlike dog or cat food, you could not produce just one fish food. The recipes must cater for carnivorous fish as well as herbivorous ones. Although most fish are opportunity feeders, i.e. omnivores, the nutritional demands vary from high protein to high carbohydrate content. Goldfish, for example are called 'underwater cows' by nutritionists, whereas Killifish demand insects, or Mollies

must have algae.



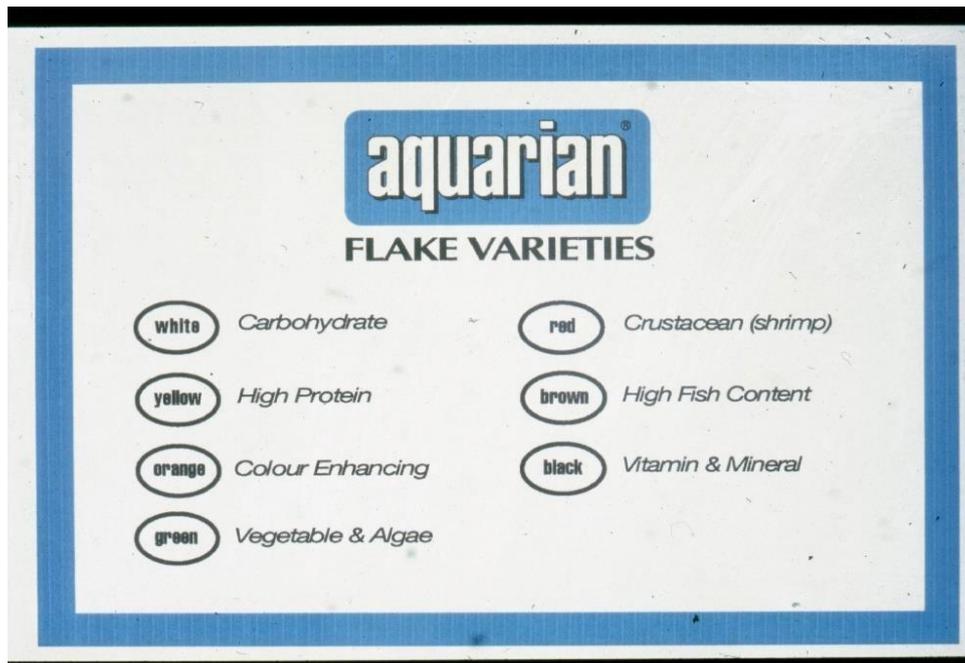
Therefore it was decided to make a range of flakes from different food mixes, identifiable by colour to the hobbyist and flavour to the fish. A range of coloured mixes were prepared using permitted food dyes – no longer permitted or desired, but this was the 1970s. It was planned to make recipes that the hobbyist could identify and actually choose for hand feeding to individual fishes.



It was decided to make 7 different recipe flakes to cater for all the major feeding types and blend them in different combinations to give foods for Tropical fishes, Goldfishes, Marines and Pond fish.



Discussions with Marketing Managers (such as John Murray of Pedigree Petfoods) gave the following classifications for these food types, so they could be used in advertising.



Mars Inc. owned many names that were trademarked in case they were needed – the only one that was ‘aquatic’ in nature was ‘Aquarian’ and all agreed that it was appropriate for the brand.

**S60 became Aquarian®.**

In 1973, in the grounds of Pedigree Petfoods at the Melton Mowbray site was the original Cat Breeding

rooms, part of the Nutritional Laboratory. This research unit was moved to Waltham-on-the-Wolds (then called the ASC – Animal Studies Centre) and the vacated Cat Rooms were taken over by Dr Ford and two technicians to set up the first Aquarian Laboratory, called the ‘Aqualab’. This was filled with traditional aquaria as found in the home hobby and used to house petfish for testing the experimental mixes.



30 tanks 36x15x12" (90x38x39cm)  
20 gallon/90 litres were installed  
around the walls, with a central  
workbench holding aquatic and  
laboratory equipment.



The Leading Technician was Bob  
Smith seen here checking the fish  
faeces collected from the Goldfish  
Bowls (with bottom drain outlets  
specially made for the tests).



This was to check how much undigested food passed through the fish. This research showed that petfish could eat continuously, digest what they need and excrete the remainder.

Here are David Ford and Bob Smith working on the few extra-large tanks used to house the larger petfish.



These species were of particular interest because growth rates could be easily measured after feeding various recipes freshly made in the

Pilot Plant, using the homogenizer and rotary drum dryer.

The main growth rates were measured using fry spawned in the Aqualab. In this section of the unit several tanks were installed with a common water supply dripped in continuously and siphoned out to waste. Fry bred from fish such as Guppies and Mollies were divided into the identical tanks and water and fed different diets.

Statistical data were collected to prove the new diets were effective for fish growth and survival rates. It was then planned to test the best diets against the competition – as requested by Mr Mars (“the superiority must be proven by laboratory-controlled trials”).



To study Egglayers a technique called Photogrammetry was used. Breeding pairs were housed in an aquarium with a ruler installed – such as these Kribensis, who were given a plant-pot cave to produce a family. The fry were SLR photographed as they swam by the ruler and the prints filed.

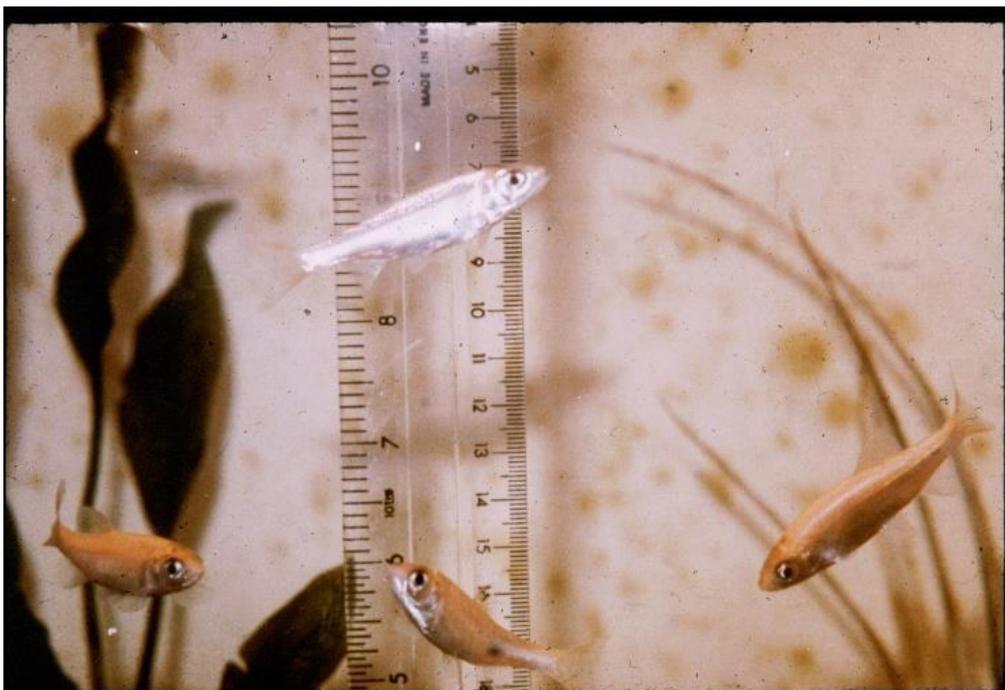


Next are the same fry a few weeks later showing rapid growth.



The photographs were taken at day one, one week later, then one month and so on, with babies divided into aquaria where different diets were fed. Comparison of growth against the ruler measurement showed the best recipe and provided documented proof.

Here are coldwater species (Orfe) being photographed and measured.



Another requirement of nutritional studies is the acceptance of the differing recipes. To measure this, the flaked diet was pressed into a tablet form, using a tablet maker, with a die that gave a slight concave structure.

This allowed the tablet to stick to the front glass. Two diets were offered and which tablet attracted the most attention (by simple observation) was taken as a method of preference testing.



In the 1970-80s the clocking-in area of Pedigree Petfoods at the Melton Mowbray site had two large aquaria for decoration. One was a tropical freshwater tank and the other a marine tropical with Coral fishes.

David Ford used to look after these tanks but with the Aquarian project they were pressed into use for testing experimental mixes.



Here Bob is trying a red flake (contained Shrimp) made in the Pilot Plant from a white fish and dried shrimp mixture.

Outside the Aqualab three large plastic containers were installed with a flow through system and filter. Pond fish (Goldfish and Koi) were divided among these 'ponds' and the fish fed on food pellets made in the dried dog food plant. The process was automated by using the photoelectric cell operated feeders. The trial was setup and left to run for months,

then the fish taken and weighed for recipe effectiveness on growth rates. Colour and department was recorded by photography.



A small indoor pond was also setup to test a flake format for feeding pondfish.



On the right are some Goldfish Bowls used to house Marine Coralfish via a low sea-salt formula.

This was a separate experiment requested by the Directors since

the facilities were available to them for developments other than a fish food.

R&D Director (Hugh Palmer) suggested that a novel aquarium would be one where the fish could swim from tank to tank. Hence the above test design was built...the idea was never developed for marketing but such tanks did eventually appear from other manufacturers. They were never popular.



Work continued from 1973 into 1974 with fresh food mixes from the Petfoods' factory. They were turned into flake forms on the Pilot Plant equipment and then fed to the various species of fish.

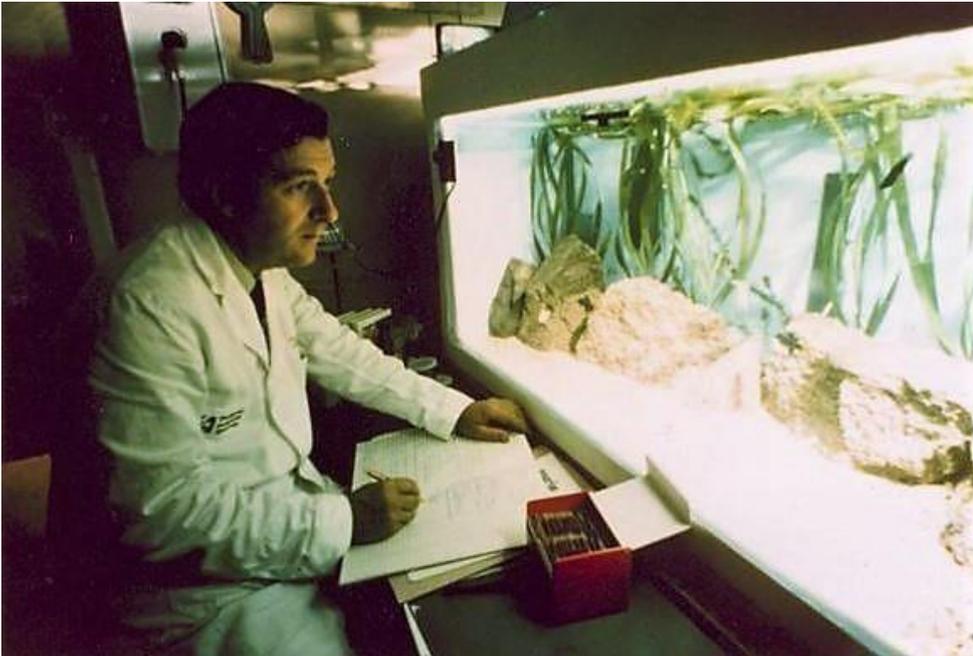
The best recipes were chosen from the fish growth rates, colour, deportment and also acceptance from the preference trials.



These were combined in differing ways and fed as a mixture. The objective was to use the 7 chosen recipes in a way that gave a Goldfish, Tropical and Marine blend.

That objective used data from published research work on fishes

by the Universities and various Edible Fish Authorities.



David also kept records of all the research using personal observations and photographs. A monthly report on progress was sent to the R&D Director and Marketing Managers.

Marketing dept. arranged an MR test on the fish care market with Hobson Bates Ltd. They reported

that most aquarists only remained in the hobby for 3 years. Then they lost valuable, or much loved petfish, and left the hobby. It was decided that the Aquarian product range must include more than just food – water treatments and remedies were needed as well as information via Guides and advisory publications.

Dr Ford turned to a company called Thomas's at Shelf, West Yorkshire, which had recently been acquired by the Mars Group. They already sold a small range of remedies under the name Petcraft. They even had the UK franchise for Tetra of Germany, distributing the fish food with their own range of pet products (such as dog leads and coats made from leather and fabric at the factory).

Through Thomas's Ltd., a firm called Tropicure Ltd. at Leeds was approached to make a range of treatments and cures to add to the range. Jointly developed with Tropicure's chemists, Dr Ford and his staff prepared and tested the chemicals in the Aqualab.

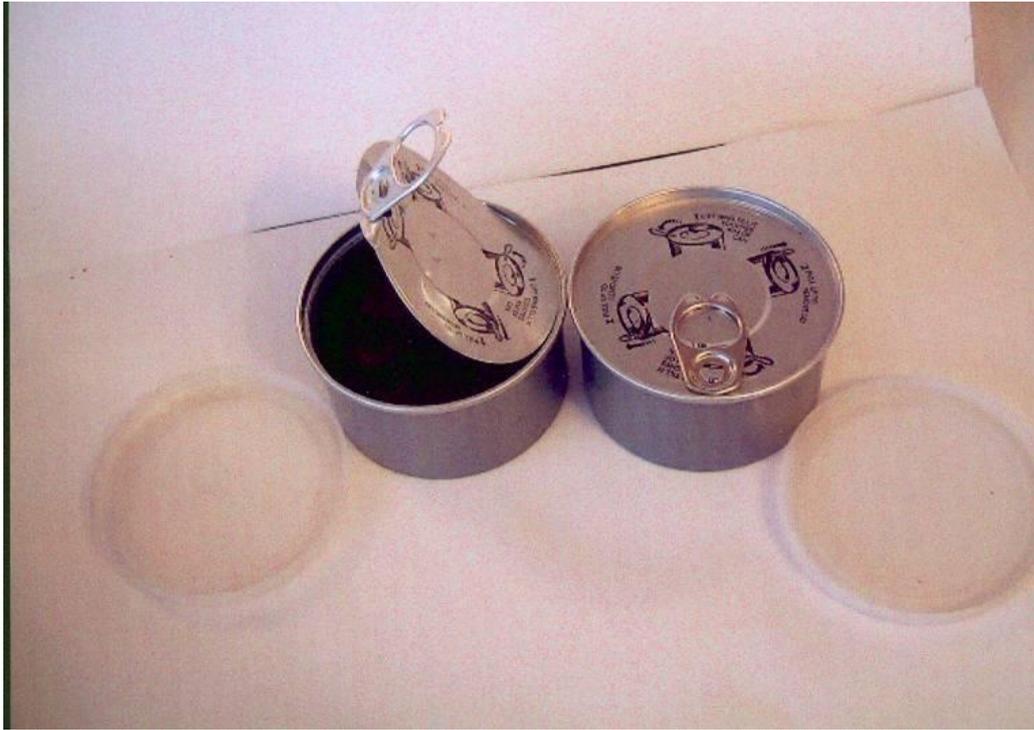


The feeding trials were recorded by the photogrammetry methods with split tanks etc., but traditional feeding was also carried out. This involved treating the fish as a hobbyist would. Daily feeds (with observation) in typical aquaria found in the home were carried out six days a week.

The large tanks housed marine species and the standard ones had Community Tropicals, Livebearers, Rift Valley Cichlids, Catfishes, Killifishes, Characins and Goldfish, representing the range of species kept by devoted aquarists within the hobby.

Note the range was now in pots. These were developed by Pedigree Petfoods Packaging dept. Dr Ford gave them a brief that included the fact that the flakes were made from fresh ingredients and so must be packed in a sealed pot, wide enough to take the aquarist's hands (to pick out individual flakes) with an easy open top and reclosable lid to retain the 'freshness'.

Made from Aluminium, the chosen design was squat (a novelty in the fish food range on the market – most were tall drums, often cardboard). The Aluminium lid could be removed via a ring-pull, discarded and replaced by a plastic clip-on lid. The largest can (1 litre) was actually made for Cadbury ‘Smash’ dried potatoes. David added BHA (butylated hydroxyanisol) to the recipe to scavenge the Oxygen within the pot, giving an inert atmosphere for long-term shelf-life and prevent the fats and oils going rancid.



The Aluminium prevented air access to the Oxygen-deficient (via the BHA) internal atmosphere, which, coupled with the less than 4% water content, gave a long shelf-life. Since a ring-pull opening ended this seal, the reclosable plastic lid helped reduce moisture access, especially in the fish-house or storage on top of the aquarium. Long term analysis of stored samples showed no nutritional deterioration after more than 5 years. Once opened, use within 3

months was recommended since the Vitamin C content began to fall below ideal levels. Eventually, EU (then EC) rules required a best before date of 18 months' age to guarantee Vitamin levels remained the same as claimed on the label.

When Aluminium became too expensive high-density plastic replaced the metal and a foil seal replaced the ring-pull, but the inert atmosphere storage 'to lock in the freshness' was not impaired.



In meetings with the PR Agency, Marketing and David Ford, the above range was agreed to be launched. Seven remedies - White Spot Cure, Fungus Cure, Algae Cure, General Tonic, Dechlorinator, Tapwater Treatment and a Plant Food. The seven flake recipes to be blended to give a Tropical Fish Food, Goldfish Food, Marine Fish Food, plus a speciality range. These were Growth Food (raised protein by using eggs), Colour Food (by using added Canthaxanthin), Carnivore Food (all meat and fish recipe), Vegetable Diet (added peas – since Yorkshire peas were used, this recipe became known as the ‘Yorkshire Mushy Peas’ food and a joke among aquarists for many years).

A fry food for baby fishes was requested. It was hoped to use Frippack, the commercial diets made by another Mars Company, but it was not available for various reasons. Hence the flake food was ground to a powder in a sieving machine. By using two grades of sieve, a coarse and a fine powder was obtained. These were packaged as Fry Food for Livebearers and Fry Food for Egglayers.

The Goldfish recipe needed to have higher carbohydrate content for nutritional reasons. This was sourced from another Mars Company, Dornay Foods. Their Yeoman mashed potato was slurried onto the drum dryer to give a pure white flake.

Trials changed from testing the basic seven recipes to prepared foods, with Tropical, Goldfish, Marine fishes and their fry, raised exclusively on these products. Arrangements with local petfish importers sourced sick fish, which were tested with the remedies made by Tropicure Ltd. of Leeds. To do this work a Home Office Licence was obtained and the Aqualab was routinely checked by a Home Office Veterinarian.

The colour food was a flake containing a compound called Canthaxanthin. Other manufacturers were noted to use Astaxanthin, an agent for making the flesh of farmed salmon pink, but this was expensive and under

investigation by the Ministry of Agriculture, Fisheries and Food. Canthaxanthin was used by breeders of pet birds to enhance pink or red feathers under the name Carophyl Red. The level required was tested with Bleeding Heart Angels.



The two photos show sister fish in identical tanks, one fed with flake containing no Canthaxanthin, and the lower one with the compound. Photographic records such as these were filed to prove efficacy of the

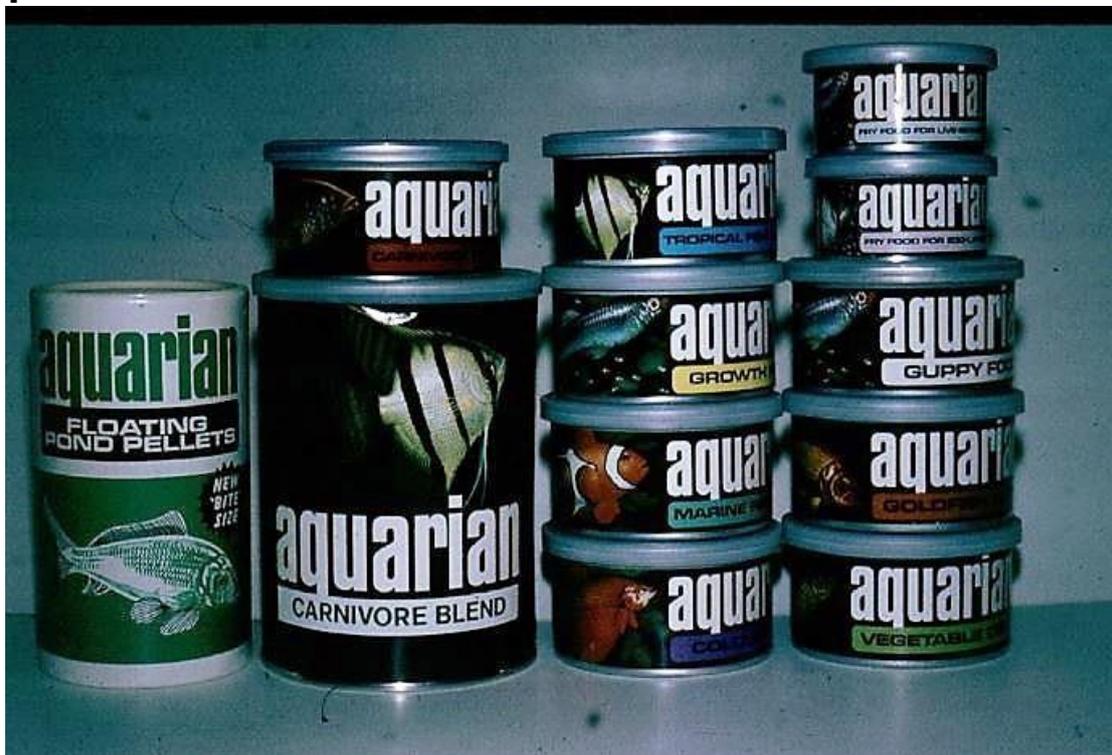
recipe. The fish were kept on the diet for many months to prove no ill effects.



Divided tanks were used to compare fish fed with and without the Colour Food Flake.

Rift Valley Cichlids and Marines were also tested but the most successful colour effect was seen in Goldfish, especially Fancy varieties such as Redcaps.

Marketing requested that a Pond Food should be included in the range and that it should be a pellet rather than a flake form. At the time, Pedigree Petfoods were experimenting in Dry Products with a Dog Food Biscuit for Thomas's to launch during 1974. The Wenger Expander used was borrowed to produce an Aquarian Pond Food pellet.



The Pond Food was a 'floater', being expanded. However, the

Pedigree Petfoods plant changed to wide bore chain conveyors and the fish food fell through. Eventually the Pond Food was contracted out (to Bakers Ltd – who eventually developed their own brand and our pond food failed).

The launch colours were white for the Aquarian logo (lower case) with a colour flash for each variety. A Guppy Food was also added to the range because broken flakes became available in production – ideal for the small Guppy fish.

The labels were designed with cartoon fish (later real photographs) prepared with a PR Agency in Liverpool by a Marketing Manager called Trevor Leech. Trevor later formed his own company: QED

Advertising, now in Manchester. They will be associated with Aquarian for the next 30 years. Other work was undertaken by the Aqualab. The local river (Scalford Brook) had captive Trout fed a pellet food developed by Dr Ford as project S80. This became a brand called 'Kingfisher' sold to local Trout Farmers, but never exploited commercially.



Another project (S71) was a bait developed for the White Fish authority based on an artificial worm, patented but again not developed commercially.

Meanwhile Rudi Barz was developing his Tetra copy in the Aqualab at Verden, Germany.



The Melton Mowbray Aqualab trials changed to comparative feeding and it was immediately shown that the use of fresh ingredients gave superior acceptance to the traditional dried meal recipes of the competition – including Tetra.

Hence when the EFFEM, Verden flaked food was tested against Aquarian, the British brand won on all counts. Rudi carried out similar trials and agreed with the results.



It was decided that the German project should be ended and their Aquarium Laboratory closed down. Rudi moved on to other work.

David Ford hired a van and motored over to Verden via the North Sea Ferry. He loaded all that valuable German aquatic equipment into the van and motored back to Melton Mowbray, where it was installed in his Aqualab.....



There were industrial problems in the UK during 1974 and Pedigree Petfoods, like all other British industries, could have been forced to work a 3-day week. Since Thomas's was a smaller firm and would not be subject to this Government interference it was decided that Thomas's should be given the Aquarian project.

Since they still had a fish food (the Tetra franchise) and the Petcraft brands, with the Remedies produced at nearby Tropicure Ltd, Leeds, it made sense to manufacture Aquarian at the West Yorkshire factory.

The main problem was that Thomas's did not have the facilities to handle fresh or frozen raw

materials. Dr Ford was asked to find a way of transporting the Aquarian ingredients to Thomas's. Longer term it was planned to install a refrigerated plant at the factory but until available he decided that the food blends would have to be canned, rather than use the original wet mixes. The canned mixes could be shipped and held at Thomas's without storage problems.

Hence a program of testing flakes made from canned mixes was started. Egg, peas, shrimp, fish protein etc. were added to the opened cans and blended ready for drum drying to give the required seven basic flakes.

It was found that the mixes flaked very well despite being precooked

in the cans and were eagerly taken by the pet fish in the Aqualab. However, after several months' feeding the fish began to lose weight and deaths occurred. This was a major problem since factory processing plant had been ordered for installation at Thomas's based on the use of canned product to be shipped to them in bulk.

The Aquaculture Unit at the University of Stirling (a world authority on farming edible fish such as Tilapia) was contracted to help. Histological examinations of the dead fish showed evidence of certain vitamin deficiencies. It was realised that the canning process reduced the levels of these vitamins, below that required by fish. Although fish require the same range of trace elements as

mammals (i.e. the levels added to Petfood's canned dog and cat foods), the levels need to be much higher (the classic example is Cod Liver Oil).

After discussions with the Nutritionists at Waltham Pet Centre, the recipes were supplemented with a vitamin and mineral mix designed to raise the levels in the canned products to cover losses in the canning process. Feeding trials resumed with the new recipes and the weight loss stopped, with no deaths. The Aquaculture Centre confirmed that the problem was solved via further histological studies.

Until Thomas's installed the refrigeration plant it was decided

that these new blends would be used for launch.

David Ford spent 2 days a week at Thomas's helping convert his pilot plant ideas into full factory production units and 3 days in the Aqualab at Melton Mowbray continuing the feeding trials with the new recipes.



Here is the commercial version of the rotary drum dryer at Pedigree Petfoods being installed at the Thomas's factory at Shelf, near

Halifax, West Yorkshire. Delivered in April 1974, this roller is 9 feet long.



A conveyor belt was also installed to move the flakes from the roller and cutter to the packing area.



A seamer was required to can the flakes in the aluminium pots.



To handle the 7 flake recipes with just one roller, a store of flakes was also needed.

The blue drums were obtained, with lids, to house the flake stocks. Different drums were emptied into a mixer according to the recipe being canned on that shift.

Initially it was planned to hand pack the pots of Aquarian. These were in 12s or 24s in a cardboard outer. The 200gram size was filled into 1 litre cans.

Buckets were also made for the salesforce to supply to retailers.



It was planned to store the stock inhouse and take it by lorry to wholesalers or the larger petshop outlets.



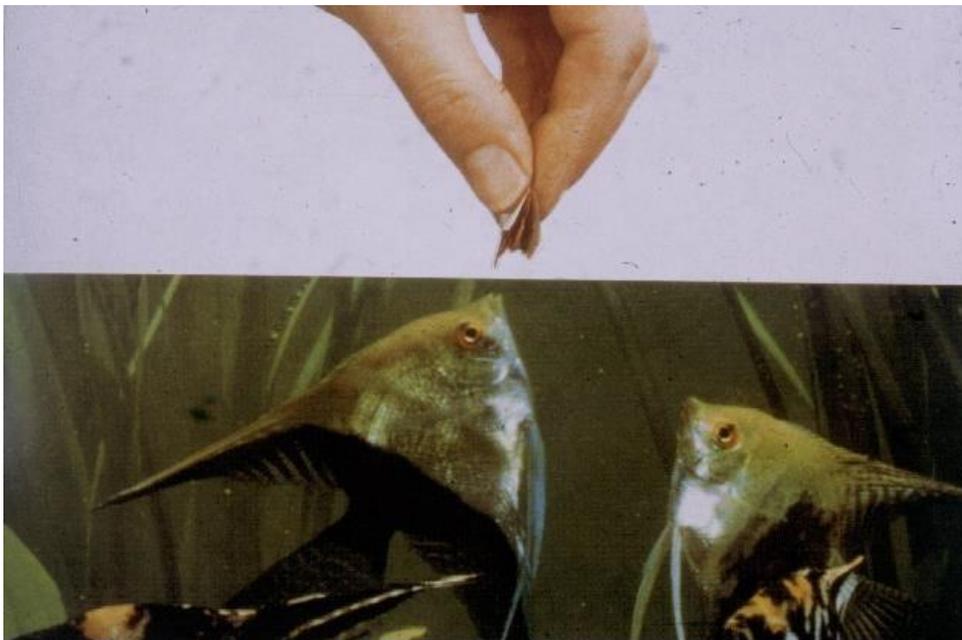
Orders could be placed with Thomas's Salesforce, who already called on petshops to sell Tetra.... Throughout 1974 into 1975, trial runs at Thomas's were made using the new equipment.

Various production problems were solved using Pedigree Petfoods and Thomas's engineers.

Recipe changes were needed to overcome sheet texture problems.

The flakes were taken back to the Aqualab for feeding trials with photogrammetry records of acceptance and growth etc.

Nutritional values of the factorymade flakes were measured by Pedigree Petfood's Analytical Laboratory so that label claims could be prepared.



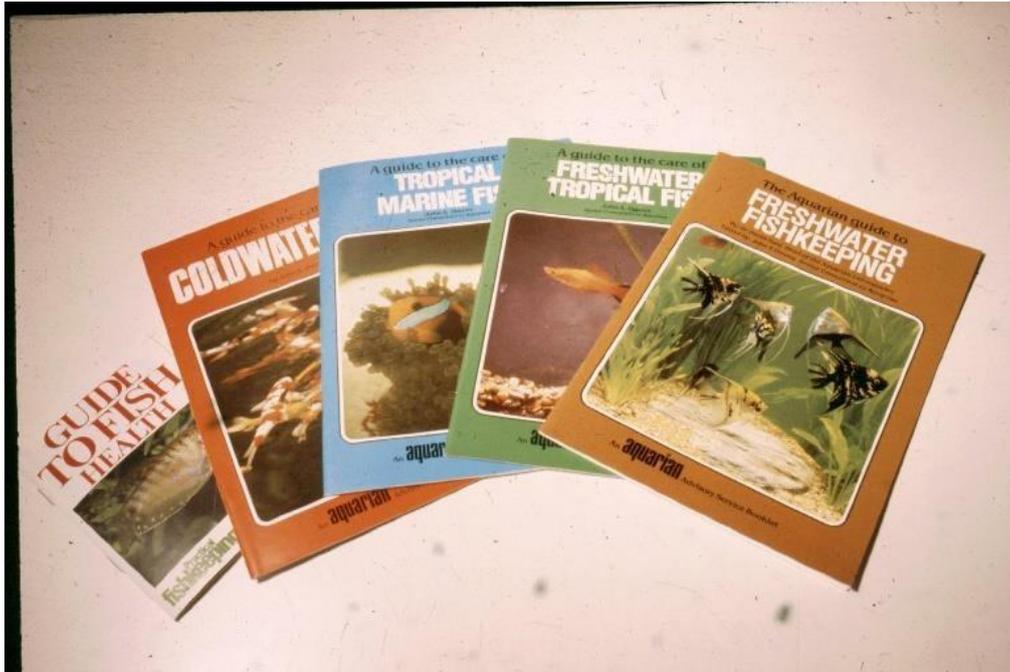
The remedies also required data for label claims and instruction leaflets. The launch design included a red cross replacing the full stop over the 'i' in Aquarian...later this was contested by the International Red Cross and had to be changed to a white one.



The formulae also had to be registered with the Veterinary Products Committee and their safety and efficacy approved.

The Ad Agency recommended that the launch should include advisory leaflets and booklets to help attract beginners to the Aquarian brand. These were written by Dr Ford, who also recommended that the help should be a complete after-sales service. This was accepted by Marketing -

and so the '**Aquarian Advisory Service**' was born.....



With Thomas's taking over responsibility for Aquarian, the Pedigree Petfoods' Marketing Manager for the brand handed over control to the Thomas's Marketing Director Mike Blackburn.

He issued a Product Launch Brief for launch into the UK trade on 14<sup>th</sup> July 1975.

The launch comprised basic fish foods:

24 pack of Tropical Fish Food

Flakes 100cc

12 pack of Tropical Fish Food

Flakes 200cc

6 pack of Tropical Fish Food

Flakes 300cc

1 pack of Tropical Fish Food

Flakes 8oz

24 pack of Goldfish Food Flakes

100cc

12 pack of Goldfish Food Flakes

200cc

6 pack of Goldfish Food Flakes

300cc

Speciality fish foods:

24 pack Fry Food for Egglayers

100cc

24 pack Fry Food for Livebearers

100cc

12 pack of Marine Food Flakes

200cc

12 pack of Growth Food Flakes

200cc

12 pack of Colour Food Flakes

200cc

12 pack of Carnivore Food Flakes

200cc

12 pack of Vegetable Diet 200cc

Remedies range:

12 pack of White Spot Cure 80cc

12 pack of Fungus Cure 80cc

12 pack of Algae Cure 80cc

12 pack of General Tonic 80cc

12 pack of Dechlorinator 80cc

12 pack of Tapwater Tonic 80cc

12 pack of Plant Food 80cc

For Eucom sales: Thomas's Fish  
Food 200cc

For Racking: Petcraft Fish Food  
200cc

Plus advertising of the Aquarian  
Advisory Service – a postal service

at Aquarian Advisory Service  
Waltham Nutritional Laboratory,  
Waltham on the Wolds, Leics.  
The window for a pond food launch  
(April) had been passed so that  
product's launch was delayed until  
1976. Problems in sourcing freeze  
dried pacific shrimp meant that  
speciality food was also delayed for  
a year.

*The* **AQUARIAN** *Story*

## Part 2 – The **AQUARIAN** Advisory Service

The launch plans included the future of the Aqualab and its Aquarian Advisory Service.



The Aqualab at Pedigree Petfoods will be relocated to a new Aquarian Laboratory at Waltham Nutritional Laboratory (now called Waltham Pet Centre) within one year. The unit will be staffed by Dr David Ford and technician Bob Smith. Dr Ford will write advertising literature for ad agency QED and run the Aquarian Advisory Service, answering postal queries advertised on the packs.



The new Aqualab will continue testing the Aquarian brands against the competition to prove its superiority and justify advertising claims. The Waltham Centre will include ornamental fish to its study of pet animals' care and nutritional needs.

During 1976 part of the Waltham Pet Centre had pillars built, shelving added with multiple electrical points. The tanks from the old Aqualab were installed.



Two corridors of aquaria included larger tanks for speciality fishes and popular tanks sold under the Petcraft name. A central compressor supplied air.



Complete with show tank, the unit was also a show piece for visiting VIPs.



For the next four years David and Bob resumed feeding trials, with David becoming part of the Waltham management.



Visitors to the Waltham Aqualab included Jimmy Young and Dr David Bellamy. Fishkeeping Clubs from around the UK visited the Aqualab at weekends with a tour of Pedigree Petfoods and a meal in the Cafeteria.

Student Veterinarians included the Aqualab in their tour of the Waltham Petcentre, which proved very interesting since most veterinary

courses did not include fish disease.



To accommodate the many visitors, the main section was kept as a display area with leaflets and booklets about fishkeeping. The side sections were reserved for feeding trials. The stairs led to a section where sickly fish were housed for trials with the Aquarian

Remedies. This was kept private for hygiene reasons and to meet the requirements of the Home Office Licence.

The Aquarian Advisory Service was advertised on the packs and in fishkeeping magazines with increasing numbers of letters arriving at the Waltham Petcentre. Replies were hand-written personal ones from David, who was able to write as one hobbyist to another. The main competition, Tetra, had to copy the idea and set-up their own advisory service – the Tetra Information Bureau.

During this period Thomas's relocated from Shelf to a factory at Pellon Lane, Halifax. The Aquarian line was moved and upgraded to make it more efficient.

This is the old filler with plungers that tended to break the flakes.

The new line at Halifax was completely automated with gentle vibratory fillers.





March 1<sup>st</sup> & 2<sup>nd</sup> 1980 the 3<sup>rd</sup> Waltham Symposium was a conference on the Diseases of Ornamental Fishes.

The top professional aquarists from around the world attended. They visited the Aqualab and attended a dinner in Melton Mowbray with speeches from Mr Andrew Edney, President of the BSAVA, and Dr David Ford, Organizer of the Symposium. The personnel shown include Dr C. van Duijn from Holland, Professor B. Gratzek from the USA, Mr Dick Mills of the

Federation of the British Aquatic Societies, retailers, wholesalers, and veterinarians. The papers given at the Symposium were recorded and published (*J. small Anim. Pract* (1981) **22**, 311-414).

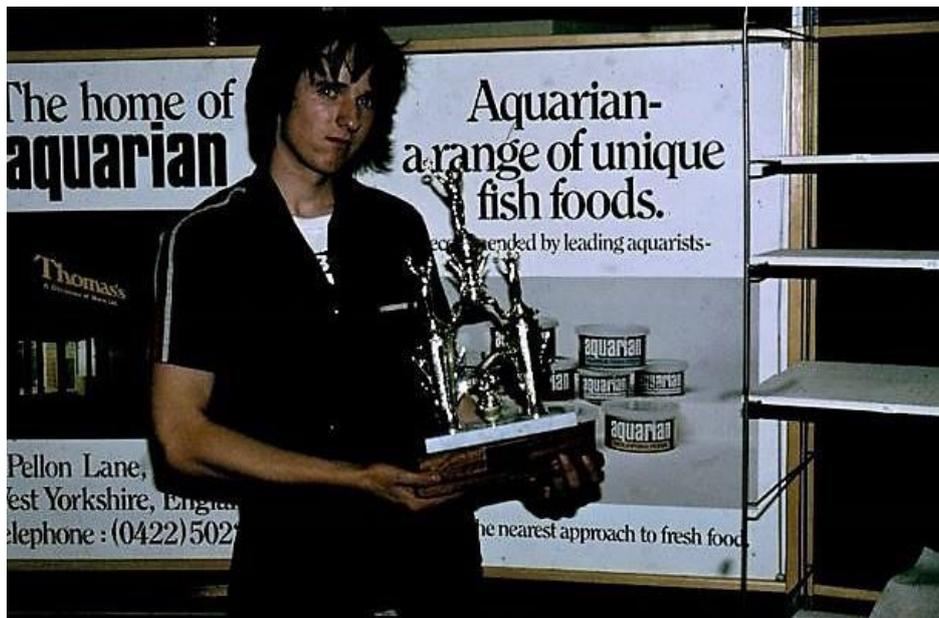


David Ford was given a regular (weekly) spot on BBC Radio Leicester answering fishkeeping

problems, as a Waltham representative. He took the opportunity to advertise Aquarian on the BBC of course....

David started attending National Fish Shows and Trade Shows with Thomas's associates to promote the brand. His role was 'Consultant to the Aquarian Advisory Service', always separate from the Salesforce who were taking orders or even selling the product at special Show prices.

The winners of the top awards at the fishkeeping shows were recruited for advertising purposes.



David interviewed them, took photographs and delivered the information to Hobson Bates Ltd., the advertising agency based in London.

Sometimes the whole family is involved in the hobby. A data base of prize-winning aquarists began to develop and the advertising campaign copied the 'Pedigree Chum at Crufts' style with claims

that 'Top Aquarists recommend Aquarian'.



Other Mars units began to take the Aquarian range. Here is David practicing his schoolboy French at the Pet Show in Paris on the Unisabi Stand.



KalKan in Los Angeles launched the range into the Californian market and David toured the USA Fish Clubs from San Francisco to San Diego lecturing on the 'Birth of Aquarian', handing out samples and literature (rewritten for the US customer).

In 1978 Effem Tokyo launched Aquarian into the Japanese market

using distributors Hikari (who only had a granulated form of fish food in their range – no flake).

They stocked Japanese shops with the Hikari and Aquarian fish foods.



Dr David Ford was sent to Japan to help with this launch.

David visited many of the Pet Shops in Tokyo, Osaka and Kyoto with Effem's Marketing Manager Takao Sawa to translate.

He attended press release meetings and gave lectures on 'Fishkeeping in England' with a translator, to promote the brand.

At the time, David was President of the Midland Koi Society and so was treated as a VIP by Japanese aquarists, with their long history of Koi breeding.



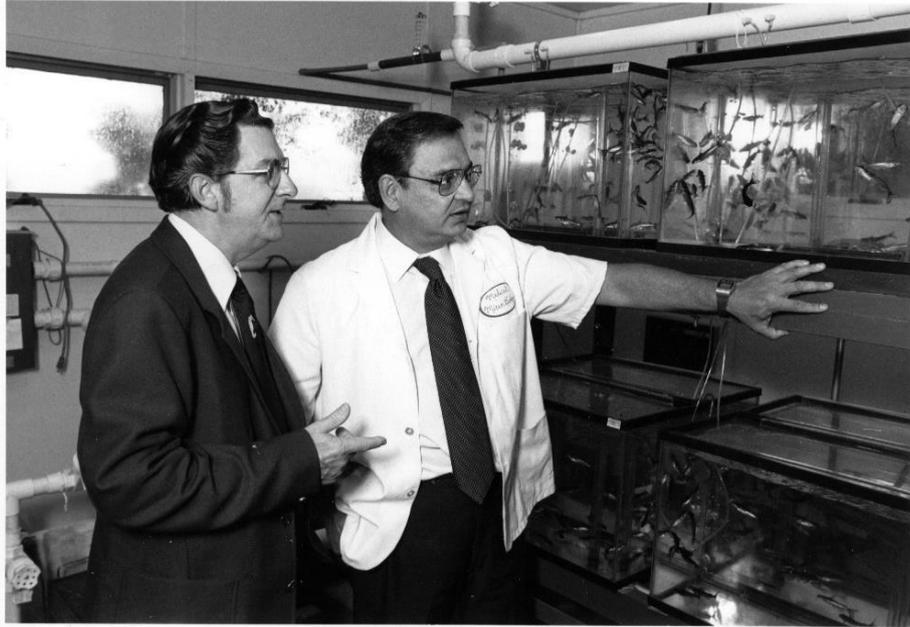
David's Japanese tour therefore included visits to several Koi Farms where information was exchanged.

Photographs of the prize winning Koi and some Japanese Fish Shows were taken in slide format, used later in a new lecture called 'Aquaria International'. This was shown to UK fish clubs over many years.

KalkKan failed to meet the targets for Aquarian sales in California, so a new distributor was recruited; a new, aggressive company called Mardel Inc. who had a range of fishkeeping remedies but no foodstuffs.

Dr Ford was again despatched to help the launch with a coast to coast tour to meet hobbyists and lecture to fish clubs in Chicago, Columbus, Atlanta, St. Louis, New Orleans, Orlando and Miami.

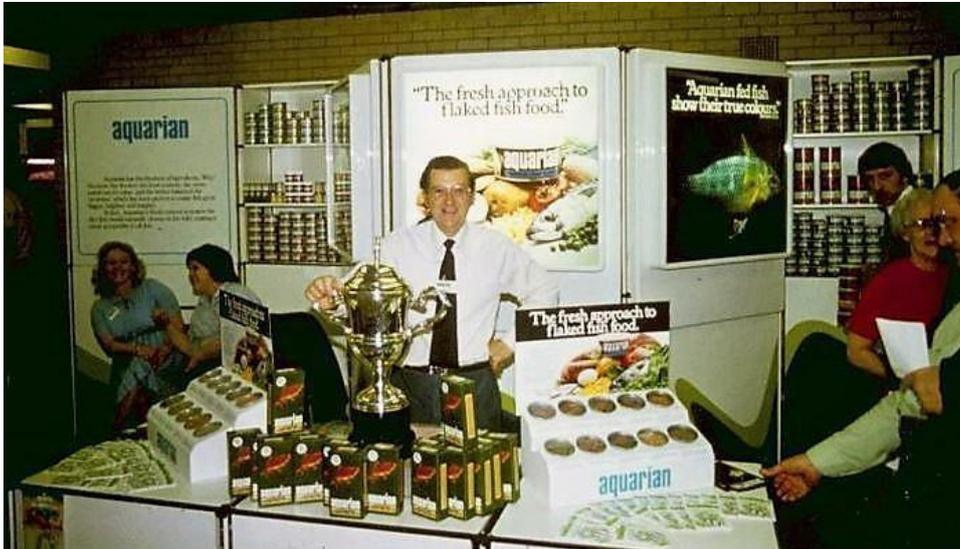
In Atlanta, David met Professor Jack Gratzek of the University of Georgia. Jack is a veterinarian specialising in fish disease. He ran a private aquarium laboratory at his home and Mardel contracted him to do some research comparing Aquarian with the American competition. Here are David and Jack in the professor's home laboratory.



The results favoured Aquarian and were used in US advertising by Mardel.

David gave a lecture at the University of Georgia because his visit coincided with a symposium they were holding for veterinarians on pet fish diseases and parasites. (Some years later Jack was invited to England to give a lecture at the Aquarian Fishkeeping Show.)

In addition to the Waltham Aqualab work David (and his family) spent most weekends at Fish Shows and



traveling around the UK lecturing to Fish Clubs.



There was even TV appearances as well as radio broadcasts – here some much needed make-up is being applied before a programme is recorded with the TV Vet.



But then, in May 1980 – the  
Waltham Aqualab was closed.



Above - dismantling the aquaria – the fish went to Natureland, Skegness and the equipment to local fishkeeping clubs.

The books and files went to Dr Ford's home in Melton Mowbray so he could continue running the Advisory Service.

The reason was cost. With lectures around the country, attending fish shows and trips abroad the expenses budget was very high. Adding this to the wages of two

associates and running costs of the laboratory, questions were being asked in high places. Waltham could not cover the costs and these were sent to Thomas's. Aquarian was very profitable but all the money was used for the move to Halifax and upgrading the production line.

The problem was referred to the McLean headquarters to see if they would allocate special funds. However, Mr Mars made the comment 'If you can't afford it, close it!'

The Aqualab became a cafeteria at Waltham Pet Centre and David was moved to Product Research at Pedigree Petfoods working on gelling systems, however, he retained his links with Thomas's

attending weekend shows and answering postal questions for the Advisory Service.

The gels were a system called Konjac from a corm found in the Far East. The extracted gelling compounds had potential use in Chum and Whiskas etc. It was also developed for use in ice cream and pouring creams – in fact Mars Patents were taken out by Dr Ford and Departmental Head, Peter Cheney. But that is another story.....

This work stopped when David Ford (and his family) was moved to Effem España. They lived in Porriño, Galicia and David attended Frigoloro, a firm contracted to make Mars Petfoods for the Spanish

market. Again, another story ('when I arrived the concrete was being laid and when I left Chum, Pal, Whiskas and Kit-e-Kat were market leaders' says David). Here are David Ford (tallest!) and his Spanish Associates at Frigoloro, Porriño, Galicia...



Being away for two years, the Aquarian Advisory Service had to be handed over to someone else.

The choice was Biologist John Dawes, who later became Editor of the *Aquarist & Pondkeeper* magazine and author of many books on fishkeeping. He eventually went to Spain too, as CEO of OFI (Ornamental Fish International).



John (on the right) attended fish shows with the Aquarian Advisory Service stands.

These stands became very professional, designed by QED's Trevor Leech.

Whist David was away, Aquarian sales continued to increase with many language labels for export product. It was decided that equipment should be added to the range and the remedies relaunched. This required a new Aqualab, which had to be based at Thomas's. Hence David (and family) was moved from Galicia to Halifax, W.Yorks and the third Aqualab was built.

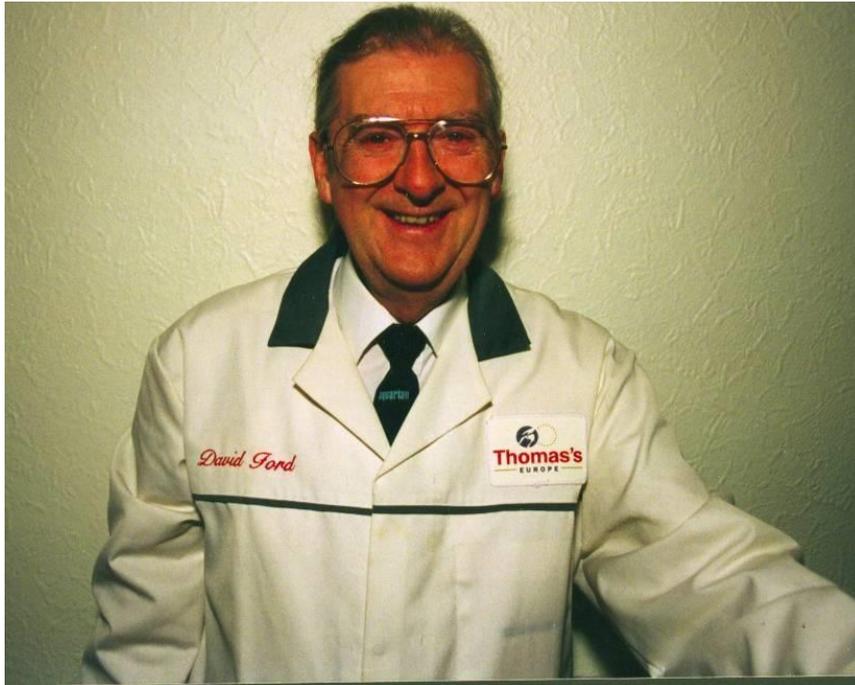


Thomas's moved from Shelf to  
Pellon Lane, Halifax.

This was a return home for  
Thomas's who started business in  
Halifax over a hundred years ago...



David Ford became a Thomas's Associate and swapped Galician Spanish for a Yorkshire dialect (and lost the tan).



His new brief was to build an Aqualab and develop aquarist equipment to be called 'Atlantis'. This was to differentiate it from Aquarian until its success was proved.

### He's home from Spain

DR. DAVID Ford, the well known aquarist who developed the Aquarian range of fish foods for Thomas's of Halifax, has returned with his family to the UK after nearly two years in Spain.



Dr Ford pictured at the Harrogate show studying the latest trade news.

In Spain Dr. Ford was working from Effrem Espana, a sister company of Thomas's within the giant Mars group. He was based in the North Western region known as Galicia, an area famous for its heavy rain. Working with one of the region's largest abattoirs Dr. Ford developed a range of pet foods for distribution throughout Spain.

Having completed his assignment, Dr. Ford has returned to concentrate on the development of the Aquarian range. His original Aquarian Laboratory, known to aquarists as the 'Aqualab', has been moved from the Animal Studies Centre at Waltham-on-the-Wolds in Leicestershire to Thomas's of Halifax.

John Dawes, who has been in his role as Senior Aquarian Advisor since 1976 and Dr. Ford's absence abroad, will continue in his role as Senior Aquarian Advisor. The brand has grown rapidly since its launch in 1976 and Dr. Ford's expertise as a scientist and aquarist will further strengthen the Aquarian Advisory Service.

Both John and David will be attending the various aquatic shows in 1983 and David, in particular, hopes to renew old

200 gallons of additional to treat larger in one filter can

one back to the as construction ed. Both System alled basic filters, the complicated out, still allowing ce but reducing minimum making elast and profes-

### David Ford back in the UK

DR. DAVID Ford, the well known aquarist who developed the Aquarian range of fish foods has returned with his family to the U.K. after spending nearly two years in Spain.

Dr. Ford developed a range of pet foods for the Spanish firm Effrem Espana, a sister Company of Thomas's of Halifax.

The Aquarian laboratory has been transferred from the Animal Studies Centre in Leicestershire to Thomas's, and Dr. Ford has taken over as head of this 'Aqualab' to work on the development of new products. The Aquarian brand has rapidly since its launch in 1976 and Dr. Ford's expertise as a scientist and aquarist will further strengthen the Aquarian Advisory Service.



## AQUATICS

# David Ford is back

Dr. David Ford, the widely-known Aquarist who developed the Aquarian range of fish foods and remedies has returned with his family to the U.K. after nearly two years in Spain.

Dr. Ford has been working for Effrem Espana, a sister company of Thomas's of Halifax, within the giant Mars group. He was based in Galicia, an area famous for its heavy rain which gives pasture for cattle and sheep.

Working with one of the region's largest abattoirs, he developed a range of pet foods for distribution throughout Spain from their headquarters in Madrid.

Having completed his assignment, Dr. Ford has

returned to concentrate on the development of the Aquarian range. His original Aquarian Laboratory — known to many aquarists as the 'Aqualab' — has been moved from the Animal Studies Centre at Waltham-on-the-Wolds in Leicestershire, to the manufacturing unit of Thomas's of Halifax.

John Dawes, who took over from David Ford during his absence abroad, will continue in his role as Senior Consultant to Aquarian.

The brand has grown rapidly since its launch in 1976 and Dr. Ford's expertise as a scientist and aquarist will further strengthen the Aquarian Advisory Service.

Both John and David will be attending the various aquatic shows in 1983 and David, in particular, hopes to renew old

### Welcome back, Doctor Ford!



DOCTOR David Ford, the well-known aquarist who developed the Aquarian range of fish foods for Thomas's, has returned with his family to the U.K. after nearly two years in Spain.

Regular readers of PRACTICAL FISHKEEPING will be familiar with David's work, for he contributed many articles before his move overseas and answered Aquatic Queries — a role since taken over by John Dawes.

David has completed an assignment to develop a range of pet foods for distribution throughout Spain, and will be concentrating on the development of the Aquarian range. His original laboratory (known to many as the 'Aqualab') has been moved from the Animal Studies Centre at Waltham-on-the-Wolds, Leicestershire, to the manufacturing unit of Thomas's, in Halifax.

PRACTICAL FISHKEEPING

JUNE '83

There was some interest in the aquatic press about David's return and he was quick to exploit this with many articles on fishkeeping in the magazines, but always extolling the excellence of the Aquarian brand.

It was decided that since David's main objective of developing the Atlantis range required more time in the Aqualab, John Dawes would remain to help with the Advisory Service. Over the next few years they appeared together at all the National Fishkeeping Shows and shared the lecture tours of the UK's 300 fish cubs.

John Dawes and David Ford on an Aquarian Advisory Service Stand sharing the many questions brought by visitors at Fish Shows such as the British Aquarists Festival, Yorkshire Aquarists Festival and the Scottish Aquarists Festival.



They also helped at Commercial Shows, not only aquatic but at Crufts and Cat Shows, where

product was sold or orders taken from retailers.

Meanwhile, back at Thomas's of Halifax, David installed a giant aquarium in the factory near the line that produced Aquarian.

Unfortunately it was too big, the Silicone Sealer burst and several hundred gallons of water flooded that line....



Another aquarium was sited in

Reception at the entrance from Pellon Lane and a display of Aquarian products added.



The 3<sup>rd</sup> Aqualab was also built. This one was more technical than nutritional with tanks fitted with experimental models of pumps, filters and aerators.



Dr Ford consulted electronic experts at Bradford and collaborated with the Sicci manufacturing company in Italy.

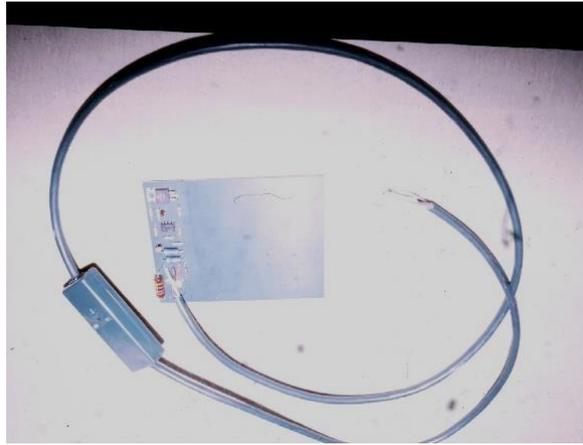
They were chosen by Thomas's Director Geof Blamires to make the

electrical range under the Atlantis name for Thomas's.



The existing Petcraft range of tanks was pressed into service.

The Sicci designs of heaters and pumps were modified and improved from Aqualab trials. These were 99% successful. The one failure was a heaterstat called 'Capricorn'.



This was a novel heater where a heating element was buried in a flat plastic plate and an electronic control unit, sealed in resin,

operated the temperature via an external control box.

Unlike all other heater-thermostats on the market at that time, it was not a glass tube. The electronic control was also an innovation, all others being mechanical control.



Unfortunately, if the control failed in the 'on' position, the unit overheated and it became a bomb!

All solutions to the problem that gave a failsafe shutdown were so expensive they could not be used. Eventually the product was dropped from the range.

The team of David Ford in the Aqualab, Ron Hillcoat in Marketing, Tony Jones in Commercial, John Bashford in Sales and the advertising agency QED developed the Atlantis range with over 200 items, plus the spares to cover guarantees.

With testing, writing labels and instruction leaflets, this took 2 years, but everything was launched as one package at the British Pet

Trade Exhibition in Harrogate on  
28<sup>th</sup> April 1985.



There were some novel features – working with consultant engineers, David made the airpumps the most silent on the market by including a ‘tuned’ input tube to the diaphragm oscillator.

The heaters had silver sand included to make the 'glowing' heating elements invisible. This also spread the heat to give a more uniform temperature profile with consequent higher efficiency and much longer life (Atlantis heaterstats are still in continuous use 20 years later).

The large power filters had removable clips so new ones could be fitted if any were broken (a common fault because of the pressure required to make a water and air-tight seal).

QED ran a campaign starting with 'What makes an underwater World?' in aquatic and pet magazines, which became 'Atlantis Creates an Underwater World' when the range was launched.

Atlantis and Aquarian were sold together as a complete system for aquarists and hobbyists, which would meet all their needs for successful fishkeeping.

Aquatic shops were given a makeover with QED designed logos.

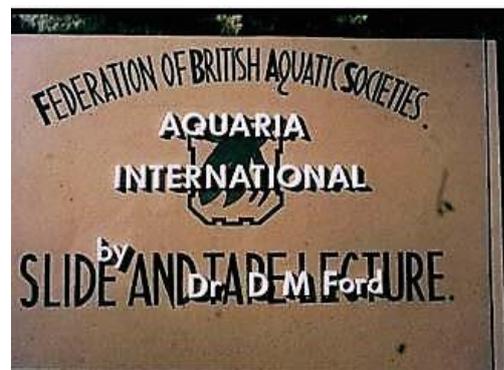
Any pet shop could install a complete aquatic section with a display of only Atlantis and Aquarian products, everything ordered directly from Thomas's.





With a range of equipment as well as foods to promote, Dr Ford went back to the Fish Club circuit and gave (free) lectures with samples and leaflets.

From Cornwall to Aberdeen, the aim was to contact all 300 UK Clubs within a few years and so convert the 'opinion leaders' to the Thomas's range.



The lectures were made professional with the latest projector equipment and bookings were made through the FBAS (also the Scottish Federation, Welsh and Irish Federations too).

On average 30 members attended each lecture and at least one was given each week.

Two lectures were given of one hour each with a natural break.

The evening would end with a question and answer session.



A display of the Thomas's range was also set-up and the products used at the end of the evening, either as prizes (if the club included a 'table show') or a raffle.

Obviously this proved very popular and requests for a visit meant a whole year became fully booked. It also meant the opinion leaders and the top aquarists were all using Aquarian foods or Atlantis equipment.

The trade also benefited from the lectures. The major pet stores and Watergarden centres that bought directly from Thomas's were visited and a talk given to bring in customers.



Free samples were not given out at these talks!



At the smaller shows David would be alone on a stand and with hundreds of visitors queuing for help from the Advisory Service, there was no time for even a toilet break!



Mrs Dorothy (Dot) Ford began to tour with David, manning the stand when he was away  
- a double act that would last for the next 20 years.....



At commercial shows a double stand was designed by QED. This one was set-up at Weisbaden, Germany (the AmZoo show) sponsored by Effem GmbH, when they decided to market the Aquarian-Atlantis range.

Stand building was hard work. QED would design the structure and deliver to the show.

David and his new Thomas's assistant Peter Turner would help QED set it up.

Often a furnished tank would be needed with all the problems of handling the water and live fish – the aquarium also needed to be very attractive throughout the show, often for 2 or 3 days.



Problems needed solving quickly – from leaking tanks to sickly fish. This display at Doncaster Racecourse (the Yorkshire Aquarist Festival) was photographed just before it collapsed, 5 minutes before the show opened...



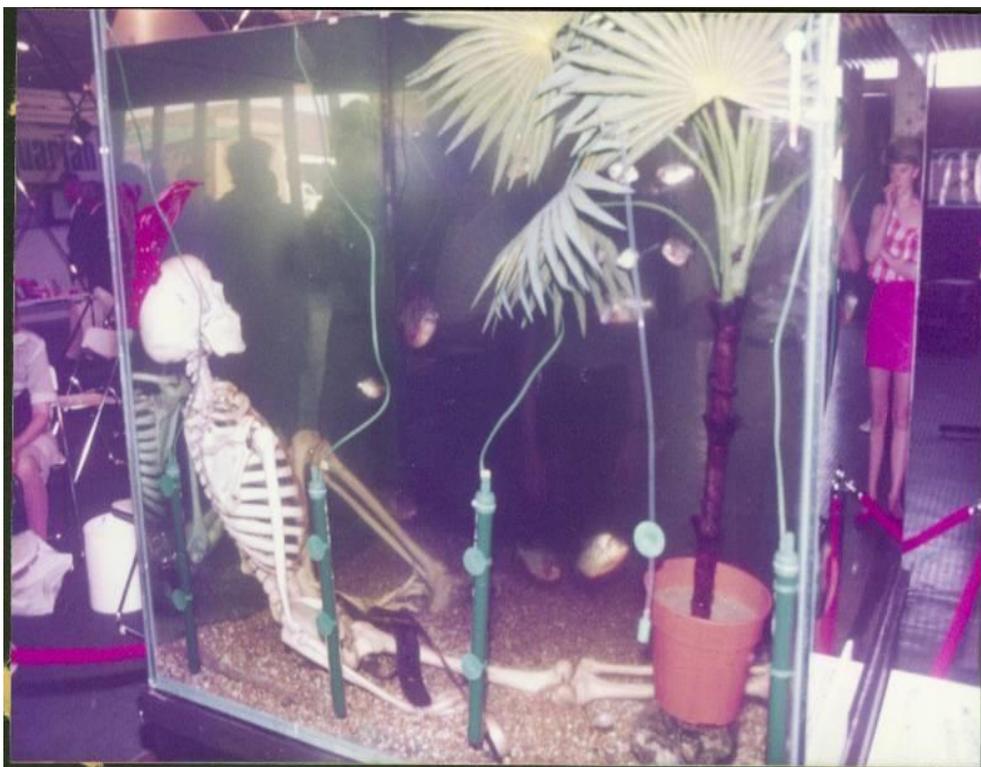
Instead of attending other people's shows it was decided to have our own. A team of David Ford, Ron Hillcoat and the AofA (Association of Aquarists, a collection of fish clubs) organised the 'Aquarian Fishkeeping Show' held in June of the years 1984 to 1989. The first two were at Kempton Park and then three at the Sandown Racecourse exhibition centres. They were very popular.

At the first show QED proposed a giant tank with Piranha fish to advertise the event. Here is the Aquarian stand being installed with the aquarium. It was decided to decorate the tank with a skeleton, dressed in a pirate costume.



David was given the task of getting a skeleton and he went to Leeds Hospital to hire one (such things

were possible in those days). Being 'Dr Ford' he was given a real one, which he did not realise (assuming it was plastic) until the fish were added. The fish went into a feeding frenzy and the skeleton had to be rescued before it disappeared.



At these exhibitions the main stands were Aquarian, Atlantis and

Thomas's Petcraft range (here is Dot manning that stand).



Non-competitive manufacturers were allowed to attend, such as fish and plant importers.

The show included fish competitions run by the AofA and the winners were recruited for an advertising campaign by QED.

Each year a VIP would be invited; these included Dr Jack Gratzek (University of Georgia) and Paul Spiece (the 'Aquatic Maestro' of USA TV fame). From the entertainment world came 'Peggy' the chalet maid from the Hi-de-Hi series, then the top BBC1 Comedy show. The actress is comedienne Su Pollard – who is also David Ford's niece. Here she is with her (then) husband Peter on a visit to the Aqualab:



Meanwhile, back in Thomas's Aqualab, David worked on a relaunch of the Aquarian Remedies. The contract with Tropicure Ltd ended and so the opportunity was taken to develop new cures and packaging. Three additions were made to the range and a numbering system created for ease of prescribing. A pipette was included for ease of dispensing.

The additions were an antibacterial solution, a disinfectant that was safe to use with live fish and a new White Spot Cure. The WS cure was effective against a new strain of the parasite that had developed resistance to the traditional dyestuff-based treatments. This remedy was sourced in America, from a firm called Mardel Inc.





1987 and Thomas's move to a new custom-built factory at a green field site at Oakwell, Birstall, J27 of the M62. This meant building Aqualab number 4!



The factory was designed as just a manufacturing unit with a flowthrough system on the ground floor.



It included a cold room, so precanned product was phased out, replaced by fresh and frozen raw materials for production of what became 'new recipe' Aquarian.



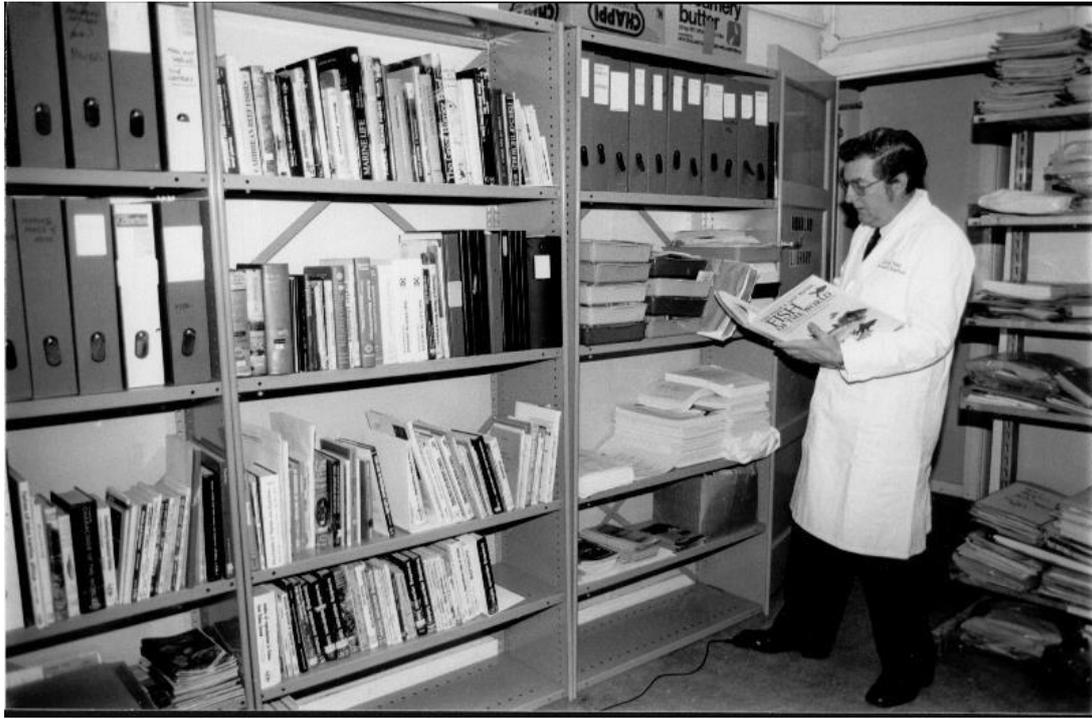
A second floor was used for office and storage with the last room in its corridor being allocated for the Aqualab, being rather low on the list of priorities.



A consultant from the American Mardel company is being shown around by Dr Ford.

The new Aqualab was built in the now traditional manner, with typical home aquaria housing popular pet fish for routine feeding trials of flake sampled by Quality Assurance from the Aquarian production line.

A large and ever-growing library of books and articles on fishkeeping, ichthyology and water chemistry was moved from Halifax to a backroom store at Birstall. This was needed for information to customers of the Aquarian Advisory Service. Now advertised on the Aquarian labels and in all magazine advertising, letters increased to 5,000 a year.



In addition, Dr Ford ran a help column in the new Practical Fishkeeping magazine

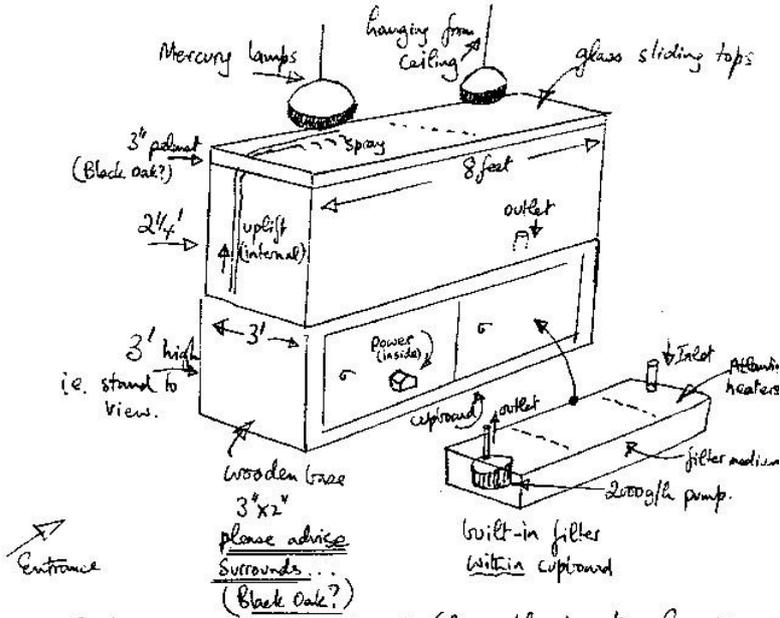
Since the Aqualab was tucked away, David proposed that the new factory should have show-tanks in the reception area – here is the original memo and stages in its construction:

To: Mike Blackwell  
c.c. Peter Lubinski

Date: 24.1.87  
From: David Ford

Show Tanks

The two tanks for the entrance area of Thomas's, Oakwell are planned to be:



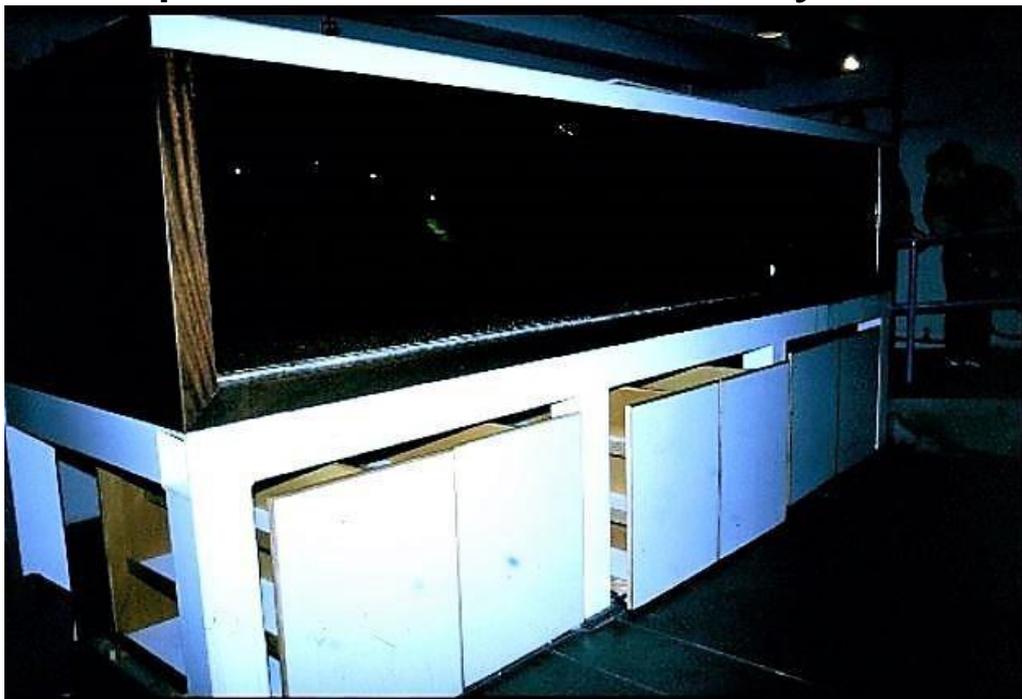
System gives total internal filtering/heater therefore pipes not visible. One will be marine, second freshwater large fish (probably Discus). Comments please...

Thomas's, Pollon Lane, Halifax, West Yorkshire.



A very expensive carpet had just been laid so David was warned about the dire consequences of a leakage...so instead of installing the planned filter pumps in the base box, internal filters were used.

The pendant lamps were supposed to be hidden behind a matching wood pelmet but the money ran out.





Each side of the stairway to the upper floor, it was planned to build two ponds with small water features and Koi in one pond Goldfish in the other, but since the money ran out, they became plant pots and remain so to this day.....

It was known that nearly 20% of households own pet fish, which means 80% do not.

To recruit new customers, Aquarian toured with a unit called 'The Learning Maze'.



Internally, a maze wound around boxed aquaria with explanatory notices for visitors. Starting with a simple Goldfish Bowl, the tanks had community tropical, special fish and marines ending with a Paludarium.



As the visitors leave, David was sitting at the exit to answer any questions and hand out 'Beginner's Guides', which included Aquarian and Atlantis advertising.



The Learning Maze went to many shows including a week in the Aquarium at London Zoo.

Another marketing venture was that top aquarists were recruited by running a nationwide quiz where club members answered questions on fishkeeping, set by David Ford. The winner of each heat was invited to a finale, first at an hotel venue and later at a National Fish Show.



The annual winner was feted as that year's AquaChamp with Aquarian prizes and publicity in the aquatic press.

The Q&As were also published in Practical Fishkeeping magazine at the year's end.

The competition was run for over 15 years and proved very popular.

Meanwhile,  
back in the  
Aqualab....



Work on Atlantis equipment continued, especially dealing with customer's complaints, which required a mechanical and electrical input.

On the nutritional side, the new factory had a freezer store built and so the dependence on raw materials from Pedigree Petfoods could end.

Instead of Whiskas, Chum or Kit-eKat blends, the original meats and fish could be used, shipped directly to Thomas's freezer as frozen, but fresh, materials. Feeding trials were needed to ensure no loss in palatability occurred.

In fact the opposite happened with a marked improvement in acceptance. Relaunches with new

labels, logos and advertising were planned.



Nutritional analysis showed that the correct levels of proteins, fat and carbohydrates were present in the new recipes.

Hence the USP was changed to 'Balanced Flakes' and the food sold

as a complete diet, with flake colour differences purely to blend the various recipes to give a nutritionally balanced meal for all species. 'Sealed in a can' was still used to explain the unique freshness of Aquarian

1988 and the Aquarian Advisory Service letters increased to 10,000 a year!

With this workload plus the demands for improved recipes for Aquarian, the Atlantis work, running the Aqualab, requests for lectures, attendance at fish shows; the job became too big – even for a keen aquarist. Hence David Ford decided to take early retirement and hand over the Aqualab to a new technician. David would take the AAS work with him, becoming a

fulltime consultant, working with the Marketing Dept.

For tax reasons, David set up a company 'Aquatic Services' with a consultancy to Mars Ltd. (and others to avoid exclusivity, e.g. EMAP Ltd. for articles in Practical Fishkeeping magazine). The office was in his Halifax home, where the Aqualab library was installed for AAS information.



The AAS postal address was moved from the Aqualab at Thomas's to a PO Box at a storage unit in a farm nearby, J. Mortons Ltd., Elland, and David collected letters daily from there. They also stored all the Atlantis spares (a thousand items) and sent out beginner's guide packs pre-signed by David Ford; hence each of the 10,000pa requests could be handled within 24 hours.

Being freed from clocking-in, Dr Ford and his wife (Dot&Dave) were able to travel to even more clubs and fish shows, promoting the Aquarian name.

Mardel Laboratories were also contracted to sell Aquarian in the USA and the Dot&Dave team lecture-toured the USA to help the

launch. A slide-talk was given to aquatic clubs in New York, Buffalo, Canton, Indianapolis, Atlanta, Los Angeles, Hollywood, Fort Worth, Houston, Dallas, San Antonio, Chicago (including some TV recording), Atlanta and Bermuda (to the Bermuda Aquarium staff).

*The AQUARIAN Story*

### Part 3 – [AQUARIAN](#) Equipment

In the Aqualab, David's replacement was Dave Sampson who was given the objective of replacing the Atlantis range with a new range of equipment under the name 'Aquarian'. Only those items that sold well under the Atlantis name were chosen, custom-built and Aqualab tested before marketing by Ron Hillcoat and QED:



Filters, aeration and heating were chosen. The filters had some clever attachments that slot together for easy maintenance.

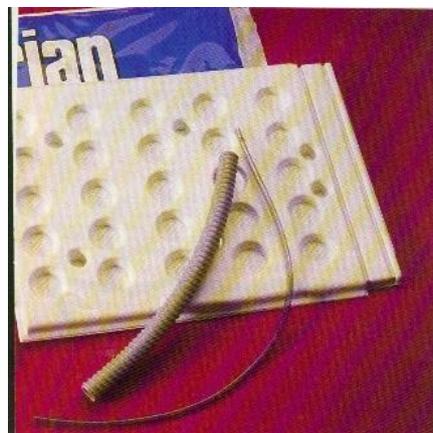
The three airpumps were based on the Atlantis models and included tubing, airstone and a spare diaphragm.

Three heaterstats, 100, 200 and 300 watts, had a robust heater,

controlled by an external unit to 0.2°C sensitivity.

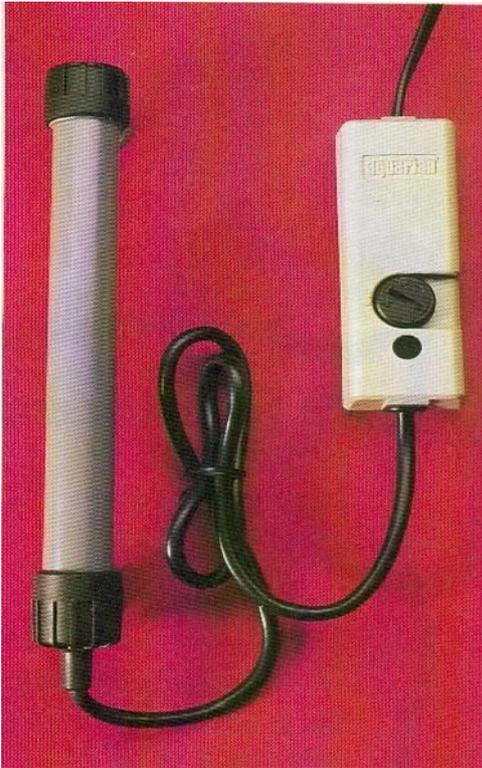
A power head was launched to operate undergravel filtration tubes connected to two sizes of u/g filter plates.

The u/g plate.



All the minor Atlantis products, from plastic plants to fish nets, were deleted.

However, to meet 2-year guarantee requirements, all the Atlantis spares remained at Mortons' store.



A digital Aquarian Heaterstat (the circuitry was based on the earlier Capricorn unit).

One of the ten Aquarian Remedies (Conditioner) was deleted, and the range increased to 12, with additions of a pH test, pH Increase and pH Decrease water treatments (courtesy of Mardel Inc.).



Armed with a new exciting Aquarian range to promote, David Ford and the other Consultant John Dawes went to all the fish shows with examples to display. David extended his fishkeeping talks to shopping malls and market stall pet shops.



The packaging for the new Aquarian equipment, and the Treatments, were printed in three languages, English, Spanish and Italian with plans by Thomas's to sell the range in UK, USA, Spain and Italy, from one production run.

The Aquarian foods were labelled with each country's language.

1990 and the Spanish launch was organised from Barcelona. Here is David Ford with Spanish distributors, preparing to give a talk about the range at a meeting of retailers. David's knowledge of Galician from EFFEM Espana days helped....



John Dawes became editor of the Aquarist & Pondkeeper magazine

and so had to resign from Aquarian to prove impartiality.

His replacement was Dr David Sands, an animal behaviourist. Dr David Sands is on the right with Dot Ford (David Ford is taking the picture).



Over the next few years there were many PR promotions to bring the Aquarian range to the notice of the

hobbyist, plus creating new aquarists.

PR Agency Gwynne Hart & Associates of London arranged for a tape on the hobby, made by Dr Ford, to go to every radio station nationwide. David also made several TV appearances and installed aquaria in Brookside and Coronation Street. He even organised an aquarium (with its pot of Aquarian) in a film (“Leon the Pig Farmer”).



Video and audio tapes to promote the brand. 'Wide Awake Club' live broadcasts 1987 and 1989 at BBC studios.



David prepares a show tank on the set of a programme for Yorkshire ITV.





YTV programme 1990  
(actually filmed in David's home)



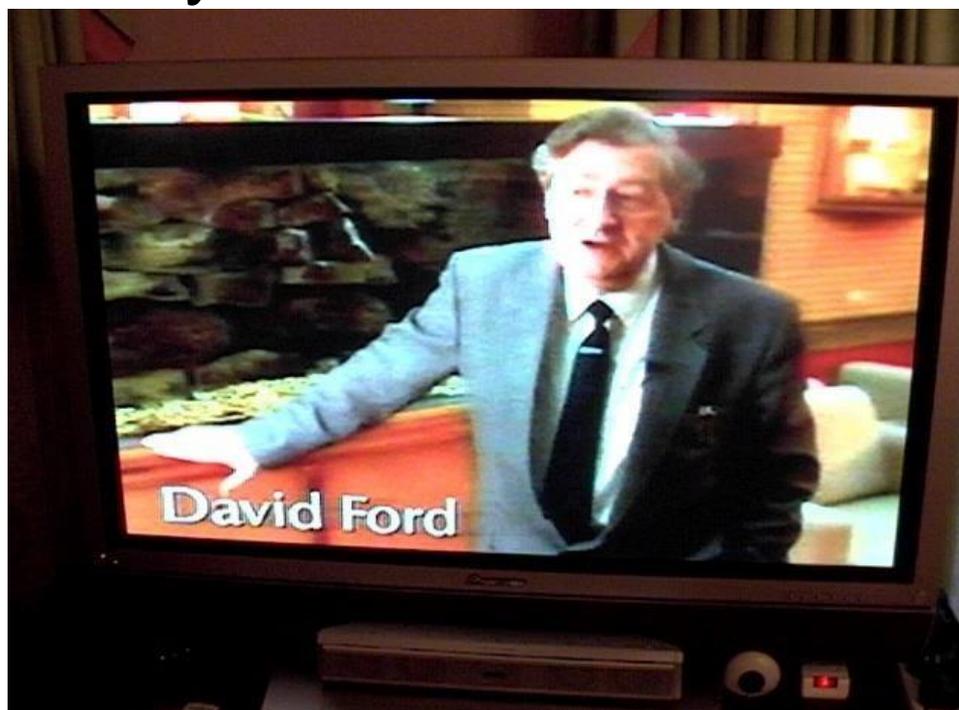
## TV Pet Show 1990



Recording a Vet. programme at  
Thomas's (1990) for TV



Sky YTV Vet's Life 1991



BBC pet show on TV 1991



Describing the Aquarian range on USA TV (Chicago 1988) Aquarian was also featured at Shows other than fishkeeping ones. This was the Aquarian Stand at the Ideal Homes Exhibition 1991. Shared with a local retailer, Kingfisheries, Dot&Dave manned the stand over the opening weeks.



David Ford also built an aquarium in one of the Show Houses at the Ideal Homes Exhibition over several years. They were always of an unusual design.



In return, the organisers allowed Aquarian leaflets to be available and a pot of Aquarian placed on display.

Working with QED, several competitions were run over the

period such as 'free food for a year' or 'Dr Ford to build your own aquarium'.

David Ford was lecturing at the American Cichlid Association in Orlando 1989, so the opportunity was taken for a special competition. This was a free trip to Florida for answering questions correctly in an Aquarian Promotion.

Won by Yorkshire Aquarists Mr & Mrs Eric da Costa, they were flown to meet David at the conference, who then showed them around SeaWorld and Living Seas at Disney World.

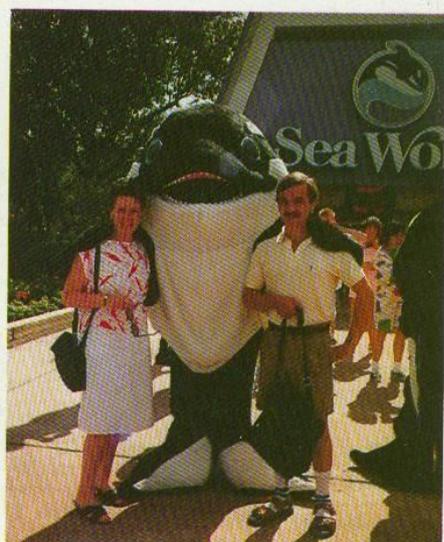
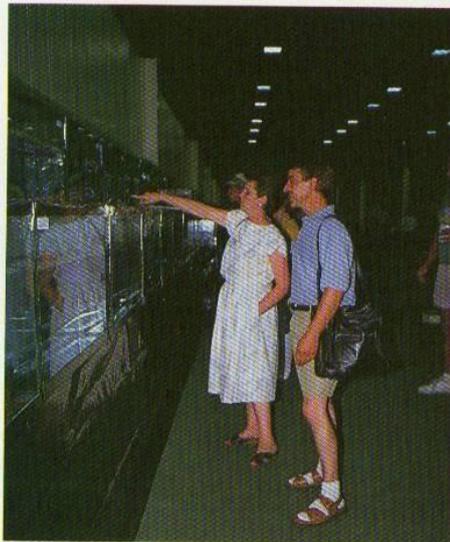
They also met America's top aquarists, such as Marshall Myers and Ad Konings, even international

ones such as Heiko Bleher from Germany.

David took them to Ekk-Will and Seagrest Fish Farms, the largest pet fish producers and shippers in Florida.



Ready for the great adventure — and chauffeur driven too!



Above, Cichlid-viewing at the International Cichlid Conference. Above right, an embrace from a friendly Killer whale at Sea World in Orlando.

The American connection worked both ways. Mardel Inc. sent a party of 16 top retailers in the USA to England, with David Ford escorting the party around Thomas's and the NEC 1990 Pet Show in Birmingham.



American Pet Shop Owners in the reception area of Thomas's.

Mardel also brought David over to USA on several occasions to attend

pet shows. The company was based in Chicago but their top sales team was Ralph & Nancy Cowell, based in Orlando, Florida.



The Cowells organised many retailer conferences with David lecturing on the 'Aquarian Story' – this one was at the famous 'Church Street Station' in Orlando.

Dot & Dave (behind camera) at home with the Cowells. Ralph and

Nancy become devoted to Aquarian and sold it all over the USA and even into Mexico.



Ralph & Nancy also stayed at the Ford's home in Halifax, touring Thomas's, Pedigree Petfoods and Waltham Pet Centre several times over the years.

*The* AQUARIAN *Story*

Part 4 – The Waltham<sup>©</sup> Aquacentre Back at Thomas's dramatic changes were taking place. The firm joined Pedigree Petfoods, sharing many departments, as a unit that eventually became Masterfoods. Marketing moved to Pedigree Petfoods, with Ron Hillcoat handing over to Simon Curtin and then Graeme Butt, who ran the Aquarian brand for many years thereafter.

Thomas's Salesforce also joined Pedigree Petfoods and so Pedigree became responsible for the Aquarian range. This meant Dr David Ford and Dr David Sands became Consultants to Pedigree Petfoods, reporting to Graeme Butt ("full circle for me" said David Ford "I started working for Pedigree Petfoods in 1963").

Thomas's Aqualab had to become the responsibility of Pedigree Petfoods, so it was decided to return the laboratory to Waltham's control. It was also decided not to physically move the unit, but the office was sited at Waltham Pet Centre, with a nutritionist using the facilities at Birstall for Waltham-type research. Dave Sampson moved into marketing and animal

nutritionist Marinus Pannevis took over.



He completely redesigned the laboratory to make it suitable for pure research into fish nutrition. It was renamed the Waltham Aquacentre.

Special flow-through tanks for comparative feeding trials were installed with a central high-tech filter system. Marinus is on the right, fish technician Peter Turner remained with the unit, on the left.

Work by Marinus proved the essential requirements for omega-3 and -6 oils and the danger to fish of mammalian meats. Hence the Aquarian recipes were modified and became totally fish-based for the animal protein sources.

### **Aquarian Equipment Ends – in a disaster...**

Pedigree Petfoods had no history of handling equipment and its accessories. Accounts also showed that the Aquarian Pumps and Filters were not profitable and the sales targets were not being met. McLean agreed to a proposal to drop the equipment and concentrate only on fish foods.

However, the accessories had to be retained to meet guarantees and the Mortons Store at Elland kept all the spares.



**'ATLANTIS' AQUATIC HARDWARE  
SPARE PARTS PRICE LIST**

CODE	BASIC PART	PRODUCT DESCRIPTION	WAIVE PRICE	SUCCESSIVE RETAIL PRICE
<b>4718/1/2/3 PUMPS F240/360/480/600 SPARES</b>				
5503	(2)	SHAFT BEARING	0.47	0.83
5504	(2)	NYLON WASHER	0.23	0.41
5544	(2)	ROD 240/360/480/600	1.00	1.50
5645	(2)	SUCTION CLIP 240/360/480/600	0.94	1.66
5563	(1)	PUMP COVER 240/360/480/600	0.20	1.39
5564	(1)	IMPELLER 240	3.00	5.29
5565	(1)	IMPELLER 360	3.12	5.10
5566	(1)	IMPELLER 480	3.20	5.64
5567	(1)	IMPELLER 600	3.36	5.92
5590	(1)	BASE 240/360/480/600	1.19	2.10
5591	(1)	CONICAL CONNECTION 240/360/480/600	1.26	2.75
<b>4783 FILTER SPARES</b>				
5503	(1)	SHAFT BEARING	0.47	0.81
5543	(1)	PUMP COVER	0.78	1.37
5547	(1)	FILTER CASE	2.75	4.86
5548	(1)	FILTER BASE	1.00	1.50
<b>4786/7/8/9 FILTERS F240/360/480/600 SPARES</b>				
5303	(2)	SHAFT BEARING	0.47	0.83
5304	(2)	NYLON WASHER	0.23	0.41
5344	(2)	ROD	1.00	1.50
5345	(2)	SUCTION CLIP	0.94	1.66
5569	(1)	FILTER SPONGE 180	1.11	1.96
5560	(1)	FILTER CASE	4.05	7.70
		WWW.MORTONS.CO.UK	0.95	1.67

This lasted for several years, until November 23rd, 1997 when everything went up in flames.



**Firefighters tackling the massive blaze**

# MASSIVE BLAZE PROBE



A PROBE was under way today after a massive blaze destroyed a former rail warehouse containing four businesses.

Thirteen teams of firefighters, including crews from Calderdale, Shipley and Dewsbury, fought the fire at The Old Station Yard, Exley Lane, Elland, yesterday.

The warehouse was used by Jarabosky, which makes quality furniture from railway sleepers, and three other firms, Schofield Motor Service, Northern Towing Company and J. S. Morton and Sons.

But Divisional Officer Paul Daly, of West Yorkshire Fire Service, said it would probably have to be demolished.

He said the alarm was raised at about 5 pm but the fire had already taken a firm hold when the first crews arrived.

"We attempted to fight it inside but had to withdraw for safety.

"The emergency was to get water on to the fire because it had a good hold and to protect surrounding properties."

Water was pumped from the nearby Calder and Hebble Navigation.

Roads around the warehouse and the nearby railway line were closed because it was feared a wall would collapse.

Traffic on Park Road was guided through Southowram from Brookfoot. The slip-road from the Calderdale Way, and Exley Lane were closed.

Mr Dean Fox, of Smith House Avenue, Lightcliffe, said he had been driving on the Calderdale Way when he spotted the fire engines.

"The firemen were just about to go in," he said. "It started in one corner and they seemed to have it under control. The next thing we knew it flared up again and within half an hour the whole place was alight and the roof caved in."

"It was unbelievable how fast it took over. There were three explosions and you could see what looked like books on fire flying out of the building."

Mr Mark Oates and Ms Jackie Bajarski, of The Moorings, Sowterby Bridge, were driving past when they saw smoke billowing into the sky.

"There was lots of smoke and an orange glow," he said. "After 30 minutes it came through the roof and eventually that fell in."

Fire crews were today dampening down the shell as investigation teams searched for the cause of the blaze.

Mortons factory burnt down when the chemicals used by Jarabowski Furniture, in the same unit, caught fire. They made garden furniture from railway sleepers and used French Polish and varnishes. The fact that a years' store of filed

letters (10,000) from the AAS were also present did not help.

All the AAS stands and show posters were also lost. Too late, it was discovered that there was no insurance.

Over the period 1990-96, from the arrival of Marinus Pannevis and Marketing Manager Graeme Butt, through to the Mortons' fire, the Aquarian Brand went from strength to strength. Without the distraction of equipment and its customer problems, the improved Aquarian Foods were sold by Pedigree Petfoods into the supermarket trade as well as the pet trade. Working as a team, Graeme Butt, QED, David Sands and the Dot&Dave

Fords, helped sales with many promotions.

David Ford & David Sands on a typical mobile stand at a fish show – there were about 12 of these visited every year, nation-wide.



Supported by Dorothy, David Ford also toured the top pet shops and watergarden centres with a smaller stand, answering customer's

questions and handing out beginner's guides.

A QED-designed mini-stand was also taken to smaller aquatic shops to help their sales.



The shop would advertise the presence of 'Dr David Ford of Aquarian' a week or two before the

actual day. AAS leaflets on the usual aquatic problems were prepared and handed out along with the verbal advice.



There were also many competitions for customers and new AquaChamps.

The Aquarian Leading Aquarists Club was formed with 200 members, top aquarists who had appeared in Aquarian advertising.

# There was even an Aquarian Magazine.

WINTER 1993  
ISSUE NUMBER 3

## aquarian world

PUBLISHED FOR LEADING AQUARISTS BY THE AQUARIAN ADVISORY SERVICE



Many aquarists keep the Oscar as a pet and it can outlive any cat or dog - see The Age of Fishes, for more insights into fish longevity by David Ford [p2].

### Also inside

Jane Bell visits the British Aquarist Festival [p4]

Haplochromine cichlids at Columbus Zoo [p5]

David Sands makes a discovery first hand in the Amazon [p10]

Jefferson Challands designs a new filter [p7]

Why less protein can result in more growth [p7]

## Aquachamp

Leading aquarist Colin Tweedle was the winner of this year's AQUARIAN Aquachamp competition, held at the Weston Show, Pontin's Holiday Chalet Hotel Centre, Sandy Bay, Weston-Super-Mare.

It was a well-deserved win for Colin who was a finalist last year. Dr Isaac Den Daas (Cambridge AS) who won Aquachamp '92 was also a finalist this year. Other finalists included Alan Stevens (Eastleigh AS), Dave

Goodwin (Dial & D&S), and Leading Aquarist David Garbille (Aberdeen AS) and Beryl Sallier (Newtown AS) who was unable to attend.

For the 5th year running, Leading Aquarist Andy Fower (Mid Sussex AS) won the Supreme Championship at the Supreme Festival of Fishkeeping. Andy won the championship with the same fish as all the

*(continued on page 3)*

This Centenary competition was interesting. Blackpool Tower celebrated 100 years in 1994. It was painted gold and a grand party held in the ballroom. Because Dot&Dave Ford had often visited the Tower Aquarium to give lectures and setup an Aquarian display (that lasted a full year) they were invited to the party. This included a book of celebration which every VIP signed, and the entries will be read out in year 2094. So, in 100 years time someone will say 'Congratulations from Aquarian Fish Foods'....





Blackpool Tower and the Blackpool Sealife Centre on the Golden Mile.

Jason hand feeds the Tower Aquarium fish behind the scenes. Winners of the competition will be able to tour this area.

# CENTURY OF FISHKEEPING

## Competition

1994 is a big year for the Blackpool Tower and Aquarium. May, in particular, will feature some very special attractions for all aquarists, and you could join in the celebrations, courtesy of 'Aquarian', simply by answering three little questions. Interested? Read on...

### THE RULES

1. Write your answers to the competition questions on a postcard or stuck-down envelope.
2. Write your FULL name, i.e. including full first name and address, in **BLOCK CAPITALS** on your entry.
3. Send your completed entry to:  
**Aquarian Century of Fishkeeping Competition,  
P.O. Box 67, Elland,  
West Yorkshire, HX5 0SJ.**
4. Closing date: entries must be received by **2 March, 1994** at the latest.
5. Only **ONE** entry per household will be accepted.
6. No correspondence will be entered into regarding the competition.
7. The judges' decision will be final.
8. No responsibility is accepted for entries lost, delayed or damaged in the post, and proof of posting will not be accepted as proof of delivery.
9. The first correct entry drawn on **3 March** will be awarded the top prize.
10. The next 50 correct entries will each receive a consolation prize.
11. The winners' names will be announced in the **April 1994** issue of *Aquarist & Pondkeeper*.
12. This competition is open to all UK readers of *Aquarist & Pondkeeper*, but not employees or their families of *Aquarist & Pondkeeper*, *Dog World Ltd.*, *Pet Business World*, or *Pedigree Petfoods*.

### THE STORY

Dr Cocker opened his 'Aquarium and Menagerie' to the public on the Golden Mile at Blackpool back in the 1800's. Some 20 years later it was decided to build a tower to rival the one newly opened in Paris, and the site became Dr Cocker's Aquarium.

The famous Blackpool Tower was built and opened on 14 May 1894, and the original Aquarium has been under that tower ever since. It is now called Undersea World and is home to many species of fish, from 50lb Pacu, to shoals of coral fishes, plus a massive 34,000 gallon seawater tank for their incredible giant turtles.

There will be great celebrations this year to commemorate the Tower's centenary (it will also be the centenary of the Tower Bridge in London). The Tower will be painted gold (should be underway by the time you read this column) and there will be celebrations every month of the year, but especially the weekend of 14 May.

The month of May has been designated a 'Fish Festival' with lectures for aquatic clubs, photographic displays of the Aquarium through its 100-year history, and behind-the-scenes tours of the Aquarium and the adjacent Sealife Centre (aquarists are really spoilt for choice in Blackpool). 'Aquarian' and the Tower authorities are sponsoring the displays with an invitation to all fishkeeping clubs to attend the Festival. There will be a lecture by **Dr David Ford** on Friday 6 May in the Tower's Herpette Room, with another by **David Sands** on 20 May. These will include free entry to the Tower Aquarium and family vouchers for many of Blackpool's entertainments. The Federation of

### THE PRIZES

**FIRST PRIZE**  
The top winner will receive **two free nights** at a three-star Blackpool hotel for a family of four, plus **free entry** to the Tower and the Sealife Centre. (Note that travel to Blackpool is not included). **Free vouchers** for many other Blackpool attractions will be included, plus **breakfast** on the two mornings. The dates are for the **Friday and Saturday nights, 13 and 14 May 1994**, which is the main celebration weekend of the Tower's centenary, with fireworks, cavalcade of historic vehicles and live broadcasts by BBC Radio 2, not to mention the launch of the world's tallest and fastest rollercoaster ride at Blackpool Pleasure Beach!

**CONSOLATION PRIZES**  
There will also be **50** runner-up prizes, each consisting of 'Aquarian' products and **free vouchers** from **First Leisure Entertainments** (owners of the Tower, Piers, Superbowl etc).

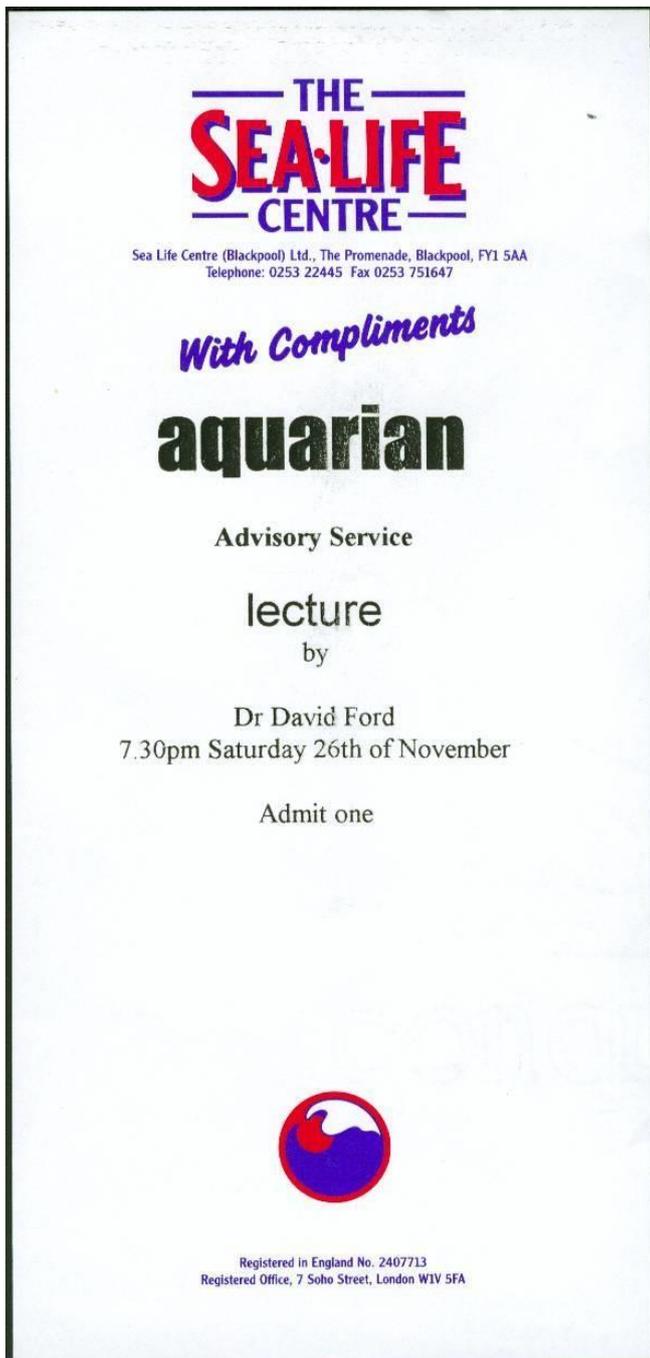
### HOW TO ENTER

All you have to do is answer the following questions and send your entry to **Aquarian, PO Box 67, Elland, W. Yorks HX5 0SJ**. The first correct answers drawn from the collected mail will win the free weekend prize.

**Q.1** In what county is Blackpool?  
**Q.2** Which flaked food is used by the Tower Aquarium?  
**Q.3** What colour will the Tower be painted in 1994?

66 AQUARIST AND PONDKEEPER FEBRUARY 1994

Another special promotion was to persuade all the public aquaria in the UK to use Aquarian and advertise the fact to the thousands of visitors they receive.



The biggest group was the SeaLife Centres and David Ford visited every one, talking to the curators and offering free Aquarian (in buckets).

Signs prepared by QED welcomed visitors to the particular Aquarium and told them that they feed Aquarian.

This was extended to other public aquaria from Skegness Natureland to London Zoo.

Eventually 20 Public Aquaria were signed-up for the promotion and many influential professional aquarists were made aware of Aquarian and the Waltham Aquacentre research.

This special relationship lasted several years – even extending abroad as new SeaLife Centres opened in Spain and Germany, with Dot&Dave being invited to the opening ceremonies.

Many of the top aquarists visited the new Waltham Aquacentre at Thomas's:-



The Pedigree Petfoods sales team decorated many aquatic retail outlets with Aquarian advertising:-



...and David continued to recruit winners of aquatic trophies and prizes for QED advertising:-







Competitions for Aquarists and juniors were advertised in the aquatic press and at club shows.

# 'aquarian'® £1,000 COMPETITION

## Win an Expert and His Goldfish



The Expert: Dr David Ford.

How about this for a 'different' competition prize? If you have always

**RUNNER-UP PRIZE**

Once you've done this, state, in no more than 40 words, why you would like to own the particular Fancy Goldfish varieties which you would choose.

### HOW TO ENTER

Write your answers and statement on a postcard or stuck-down envelope and send us your entry (after reading the RULES) to reach us by the first post on 1 October at the very latest.

Then watch out for the winners' names in the November issue of *A & P*, followed by a complete illustrated report from Dr David Ford on the delivery and installation of the **FIRST PRIZE**.

We look forward to receiving your entries.

### THE RULES

Aquarist & Pondkeeper, 'Aquarian' £1,000 Competition, 9 Tufton Street, Ashford, Kent TN23 1QN.

4. Closing date: 1 October, 1992 (first post).
5. Only ONE entry per household will be accepted.
6. No correspondence will be entered into regarding the competition.
7. The judges' decision will be final.
8. No responsibility is accepted for entries lost, delayed or damaged in the post, and proof of posting will not be accepted as proof of delivery.
9. The first correct entry drawn on 5 October will be awarded the prize.



With good sales in Spain and Mardel planning better USA sales, it was decided to expand the AAS to include these countries. The

American consultant was Ed Taylor a fish expert from the fish farm trade. In Spain, Pablo Seibers, Chairman of the Spanish Aquarists Society, was chosen. Ron Hillcoat at Thomas's was involved in this new arrangement because he was i/c Aquarian World-wide, whereas Graeme Butt was Aquarian UK.

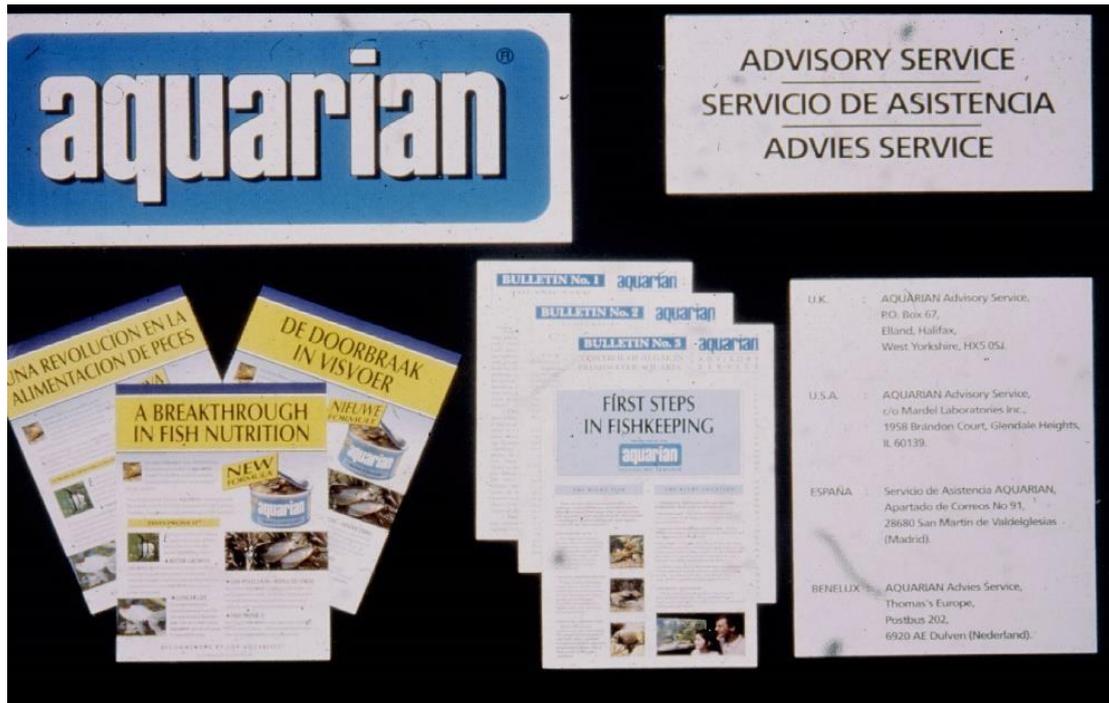
Ron arranged for both the new consultants to visit the UK and David showed them the British fish scene. He also supplied all the literature and marketing items to be copied into Spanish and American (and other languages).



Ed and his wife Cathy Taylor talking to a lecturer (with camera) with Dot and Dave (behind camera) on a visit to the National Aquarium, Sparsholt College.

A multi-language headed note paper was printed for all the consultants.

The AAS leaflets were printed in the various languages.



The addresses of the international Advisory Services were as follows. EFFEM Brussels handled the Benelux queries, but Ed, Pablo and David handled the others. Email had just been invented and this medium was used for the three

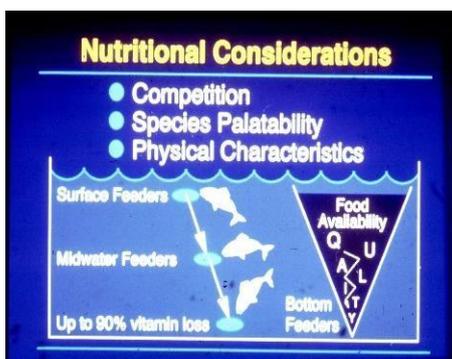


BENELUX [AQUARIAN](#) Advisory  
Service

Thomas's Europe,  
Postbus 202,  
6920 AE Dulven,  
Nederland

The lecture programmes were updated with slides prepared by QED and the content was about the changes in Aquarian recipes from the research work by the Waltham Aquacentre. Each consultant told the story to fish clubs in their own countries.

The talks showed slides of that research work by Marinus Pannevis and then Alistair Macartney who took over the Head of Waltham Aquacentre role.



**Ideal Protein Concept**

Amino acid	Amino acid ratio	Determined requirement	Estimated requirement
Lysine	100	5.1	-
Arginine	78	4.3	4.0
Histidine	25	1.5	1.3
Isoleucine	50	2.6	2.6
Leucine	87	4.4	4.4
Met + Cys	44	2.3	2.2
Phe + Tyr	87	5.0	4.4
Threonine	52	2.0	2.7
Tryptophan	9	0.5	0.5
Valine	61	3.1	3.1

Catfish data from Wilson, R. P., 1994.

Wives of the consultants had to play a part, since most of this lecture work was evenings and the fish shows were weekends, with travel all over the country. Particularly Dorothy Ford of the Dot&Dave team.



Preparing display samples in hotel rooms.

To keep costs low these were always Travelodges or B&B rooms. Whatever the weather, whatever the problems, however you feel, you had to turn up at every booking and make it an evening to remember....."Aquarian".

At the Shows, the stand always had to be built, manned throughout and dismantled at the end. Team work was essential.





Having a lady consultant (even an unpaid one)

is useful on many occasions – such as supervising the children in junior competitions. This one is the Aquarian Painting Competition.



Also handing out prizes to winners of awards at the fish shows...



....and  
someone to  
receive the  
flowers with a  
thank you from Show  
Organisers.



The period under Graeme Butt was  
also the time when new products  
were added to the Aquarian range,  
plus better packaging and logos.

**NEW**

FROM

# aquarian®

## **An exciting range of Granules, Floating Sticks & Floating Pellets**

Now you can give your tropical or coldwater fish a choice of superior nutrition – AQUARIAN Flakes or the exciting new range of AQUARIAN Tropical Granules, Tropical Floating Sticks or Goldfish Pellets.





Advertised at the fish shows, of course.

Plus literature sent to top aquarists and all the Aquarian Leading Aquarists.

**AQUARIAN® GRANULES**  
**FOR TROPICAL COMMUNITY FISH**

Ideal for all tropical community fish – top, middle or bottom feeders – these highly palatable granules provide outstanding nutrition, specially developed to minimise nutrient loss in the water. Feed them on their own or, for variety, alongside AQUARIAN Tropical Flakes.

**AQUARIAN® FLOATING STICKS**  
**FOR LARGE TROPICAL FISH**

New AQUARIAN Floating Sticks have been specially developed to provide unbeatable nutrition for large tropical fish, such as Oscars and Cichlids. AQUARIAN Floating Sticks are a complete, balanced diet that big tropical fish will find especially appetising and satisfying.

**AQUARIAN® FLOATING PELLETS**  
**FOR GOLDFISH**

Appetising, high in protein, and easily digested, new AQUARIAN Floating Pellets provide a nutritious, complete and perfectly balanced diet for all Goldfish. AQUARIAN Floating Pellets can be fed on their own or together with AQUARIAN Goldfish Flakes.

**AQUARIAN Granules, Floating Sticks and Floating Pellets can be fed on their own or, for variety, alongside AQUARIAN Flaked Fish Foods.**

**FOR FREE HELP AND ADVICE** on all aspects of fishkeeping, write to the Aquarian Advisory Service, PO Box 62, Filand, Great Yarmouth, Norfolk, NG25 0SL.

**aquarian**  
 RECOMMENDED BY TOP AQUARISTS

© REGISTERED TRADEMARK © POLIGREEK PETFOODS

Eye-catching metallic finish and coloured lids were used.



The brand has grown to 21 units.

Ed Taylor left Mardel and so a new American Consultant was needed.

The choice was Ray 'Kingfish' Lucas who was a travelling oneman show for several aquarium companies.

Dr Dave Sands also decided to move on and became an expert in dog handling (more lucrative than fishkeeper's problems). Graeme Butt decided to replace him with two consultants, so a replacement was possible for David Ford when he retired (again).

These were Ben Helm, a lecturer in Fish and Fish Farming at Brooksby College, Leicestershire, and Dr Peter Burgess, a lecturer in fish diseases at Plymouth University and publisher of several books on fishkeeping.

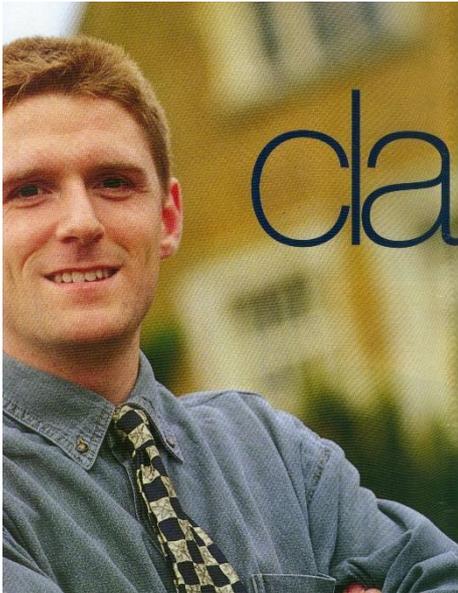


Ray

prizegiving in the USA



Ray visiting the Waltham Aquacentre



Part of an advert featuring Ben



Fishkeeping might be a relaxing hobby enjoyed by millions of people in Britain, but to Ben Helm, lecturer in Aquatic Studies at Brooksby College, it's also a subject for serious study.

Dr Peter Burgess quizzes two finalists in the Aquarian Aquachamp competition.



The fire at Mortons was just one of a series of disasters that struck Aquarian over the next few years.

What happened next also shows the importance of a good Marketing Manager being responsible for any branded goods.....

Graeme Butt moved on in Pedigree Petfoods and a trainee Marketing Manager was appointed, the brand's first lady – Eleanor Ashfield.

She decided that drastic changes were needed to modernise the brand. She wanted to dissolve the Aquarian Advisory Service and tried (and failed) to remove Dr David Ford. Ben Helm was ignored and resigned – eventually becoming the director of a competing company. Dr Burgess nearly left too.

QED was no longer used; the advertising campaign being given to a new PR Agency who produced

very 'arty' adverts (at great expense) that were very clever but meant nothing to the aquarist.

Lectures were stopped and so too was attendance at Fish Shows – these were replaced by Pet Show attendance (where perhaps one in 20 visitors was a hobbyist). Here is one example – the Sainsbury Travelling Pet Show:



Loading the samples and displays

at Dot&Dave's home.

Delivery to an open-air show where tents were used.

Setting up aquaria and tableau (hoping it does not rain).

Waiting for visitors to collect

Beginner's Guides (few did).

Lectures to Clubs were ended and the AquaChamp competition was not run.

There was nothing for the Aquarian Leading Aquarists club. On top of all this, all the Aquarian and Atlantis accessories were lost in the fire at Mortons and Eleanor refused to renew the Morton contract to help with AAS letters.

The Advisory Service address was taken over by Pedigree Petfoods with a PO Box at Melton Mowbray. Letters were redirected to Dr Ford

in bundles, often weeks later, so urgent request for help became just letters of apology for the delay. The Spanish and Benelux AAS were closed down.

Tetra, Hagen and King British fish food manufacturers filled the void at the Fish Shows and captured the top people for advertising, such as Champion of Champions and Fish of Fishes. The FBAS tried and failed to make contact with Eleanor Ashfield.

The arrangement with the Public Aquaria was taken away from Drs Ford and Burgess, with Pedigree Petfoods handling supplies of bulk fish flakes through Eleanor. Requests from Curators were either ignored or the wrong flakes sent, even out-of-date product being

supplied. Complaints to Drs Ford and Burgess showed the system was breaking down, but Eleanor ignored memos or phone calls about the problems.

Sales began to decline, especially the new novel lines, which began to actually lose money. Eventually Eleanor Ashfield left the company and there was a period with no Aquarian Marketing Manager at Pedigree Petfoods or the job was added to a succession of junior managers handling dog or cat food accounts.

Hence the Global Aquarian Manager, Ron Hillcoat, had to take over. He deleted all the lines that were losing money and relaunched the basic range of Tropical, Goldfish and Marine Flake Food.

QED were persuaded to help again and the Advisory Service with David and Peter resumed at least limited PR work.

The relaunch was in 1999 with a new USP “superior nutrition for fish” based on the work of the Waltham Aquacentre. After Alistair Macartney’s work on Omega lipids, Rimi Obran took over the Centre and she developed a 5-flake recipe, which reduced production costs without compromising nutritional value.

After Rimi, James O’Reilly was briefly i/c and he worked on dietary supplements. They succeeded in removing any artificial additives such as food dyes and preservatives, to justify the claims of superior nutrition.

Waltham Aquacentre published their work as scientific papers, such as Proceedings of the First International Meeting on Zoo Animal Nutrition (1999) and Journal of Nutrition (Pannevis, 1994). This allowed another USP - 'Caring expertise in harmony with Nature' to be justified.

API sold the new range in the USA using all these USPs.

# Aquarian® Flake Fish Food.

## Superior nutrition for ornamental fish.

In the United Kingdom fishkeeping is every bit as popular as it is in the US – and for the past 20 years the number one choice for UK fishkeepers has been Aquarian® flake fish food!

**Aquarian® is now available in the US – exclusively from Aquarium Pharmaceuticals Inc.**

**Made with natural ingredients**

- No artificial colors
- No artificial preservatives
- Made to the highest manufacturing standards – ISO 9001

**For healthier fish and cleaner, clearer water**

- Eagerly eaten by fish
- Highly digestible
- Ultra low pollution

**Waltham® – the scientific and nutritional expertise behind leading brands Pedigree® and Whiskas®**

- Aquarian® – developed with WALTHAM® – the World's Leading Authority on Pet Care and Nutrition
- The WALTHAM® Aqualab incorporates some of the world's most advanced aquatic research equipment
- Over 25 years experience of research into the nutritional needs of ornamental fish

**Recommended by opinion leaders for over 20 years**

- 4 out of 5 major UK aquatic retailers feed Aquarian® to their fish
- Aquarian® is the only flaked fish food fed at all 22 top UK Sealife Centres
- Aquarian® is fed exclusively to endangered species in conservation and breeding projects at top zoos
- Aquarian® is used and recommended by leading fishkeeping experts

**Supporting and rewarding the aquatic retailer**

- Ongoing promotions to drive sales
- Front of store displays to attract more customers inside
- Permanent point-of-sale to catch the eye
- Sales incentives to reward staff effort and success

**Available in:**  
**Tropical Flakes** 0.42oz, 0.8oz, 1.8oz, 7oz, 5lbs  
**Goldfish Flakes** 0.42oz, 0.8oz, 1.8oz, 7oz, 5lbs  
**Marine Flakes** 0.8oz, 1.8oz

*For full details contact*  
**Aquarium Pharmaceuticals, Inc**  
 PO Box 218, Chalfont, PA 18914  
<http://www.aquariumpharm.com>

“Nurture through Nutrition” was another slogan adopted by Ron Hillcoat for reselling the brand. The Waltham Aquacentre input was featured with photographs of the Waltham Pet Centre.

## Superior nutrition for fish

To stay healthy, active and colourful tropical fish need a diet which contains the right balance of many nutrients, including vitamins, minerals and amino acids. It is also important that your fish enjoy the food you feed. If they don't, then much of the food you give will remain uneaten and cause pollution.



Your fish will really enjoy the unique Aquarian® recipe and you can be confident you're giving them the best nutrition money can buy.



### Recommended by Top Aquarists

Aquarian® is Britain's favourite fish food. Developed with expert fish nutritionists and scientists at Waltham® – The World's Leading Authority on Pet Care and Nutrition, Aquarian® is used and recommended by top aquarists and fed in major public aquaria and all the Sea-Life Centres.

For free help & advice on all aspects of fishkeeping, write to:  
the **Aquarian Advisory Service**, Waltham Aquacentre, PO Box 5059, Melton Mowbray, LE14 4ZN.

# AQUARIAN

© Registered Trademark. © Pedigree Masterfoods.

The logo became u.c. to differentiate from 'old' recipes.

The AAS had to remain a Melton Mowbray-based address, but better communications gave a quicker return on letters and Beginner's

Guides were made available via a phone call (quoted on the label). The brand was given a Website address (initially [www.aquarianfishcare.com](http://www.aquarianfishcare.com), which eventually became [www.aquarian.com](http://www.aquarian.com), and emails began to replace the post.

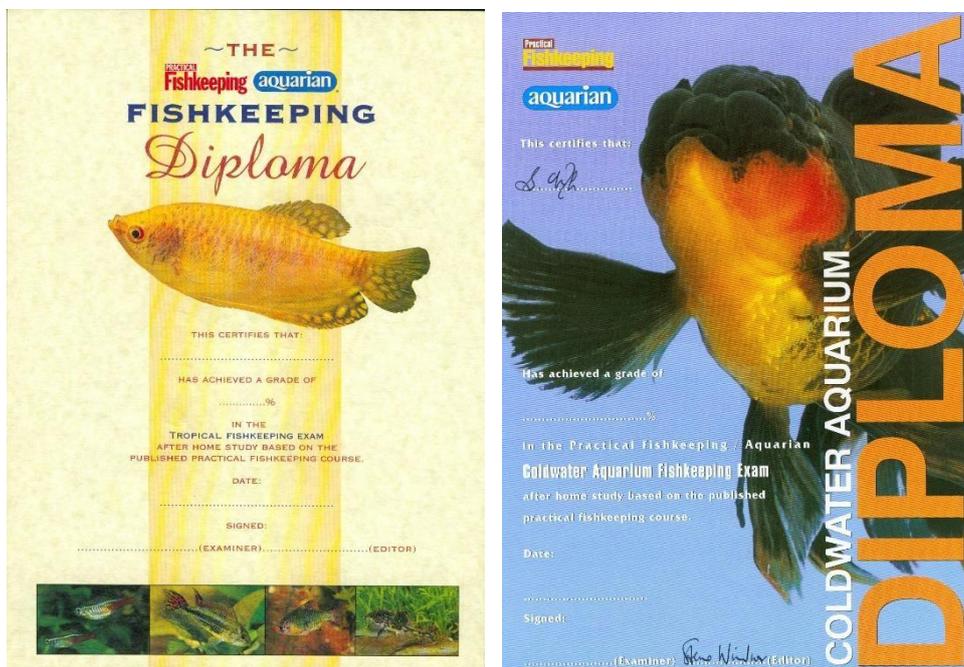
The Aquachamp competitions resumed – here David Ford is asking the questions and Peter Burgess is keeping score.



The Aquarian Leading Aquarists were contacted again. They even got a Christmas card.

With advertising in the aquatic press, the magazines allowed promotional articles to be written by David and Peter ("Consultant to Aquarian" captions). One particularly successful programme was a series of articles on the science of fishkeeping in Practical Fishkeeping. The readers answered

questions at the end of each feature and these were sent to David Ford for marking. If over 80% was achieved, the reader was given a certificate of competence.



There were four more in the series – Marines, Koi, Pond Fish and Oddballs.

They not only helped Aquarian advertising, they dramatically increased sales of the magazine.

Contact was resumed with the

Public Aquaria, especially via Peter Burgess who was known to the curators from his FAITAG (a group of Zoologists working on conservation) research.

One contact of interest was the opening of The Blue Planet public aquarium at Ellesmere Port. Dot&Dave Ford were invited to be part of the group meeting the Queen and Prince Phillip who were to officially open the Aquarium. David made sure Aquarian posters were placed everywhere and the divers hand-feeding the fish were given Aquarian buckets to use.



Aquarian posters on the main displays and the Curator is given Aquarian buckets.



The buckets are used in feeding by divers while the Queen and Prince watch.

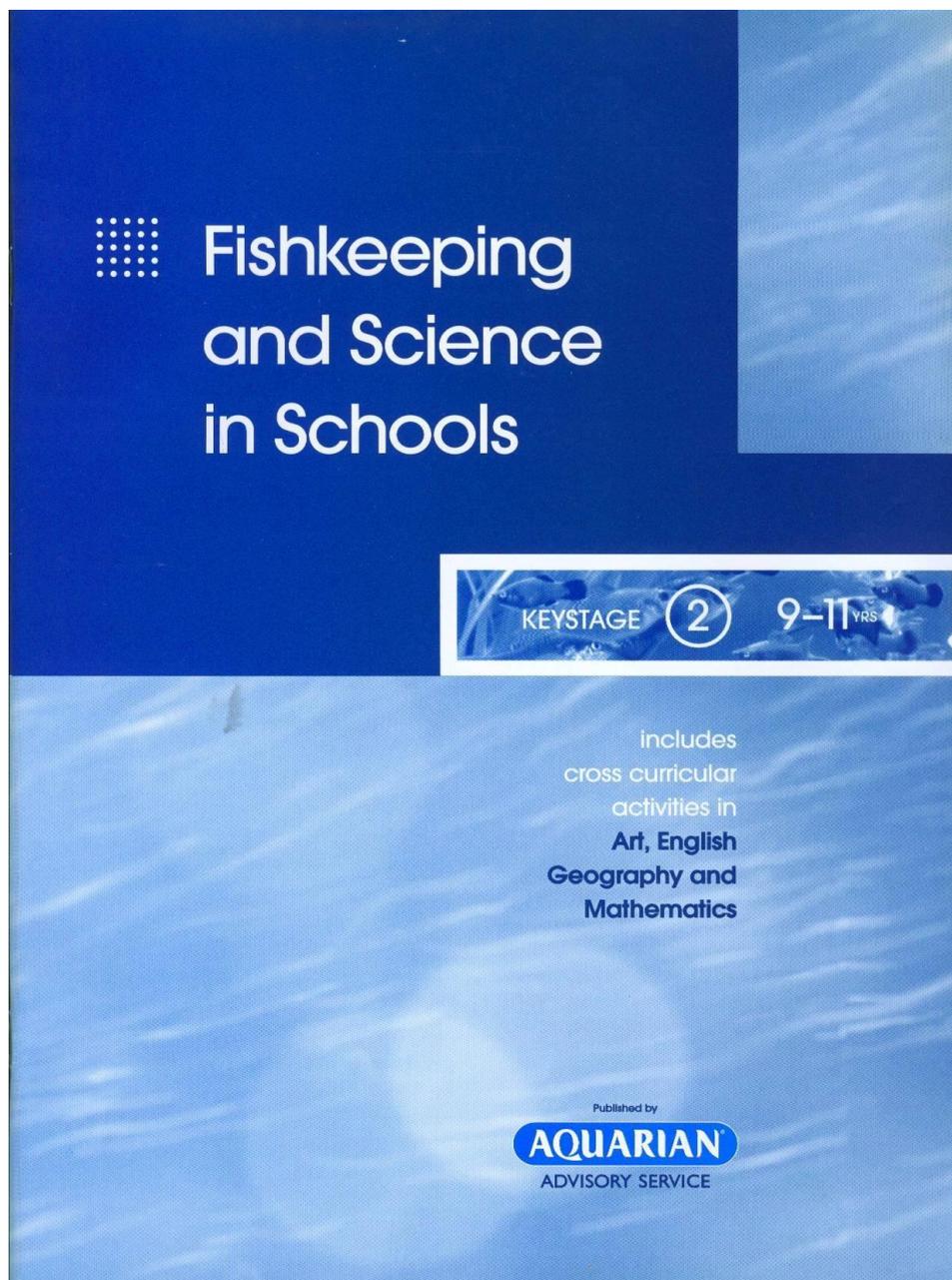


Her majesty read the Aquarian posters but she didn't ask David for a Beginner's Guide!



Special projects started again. In the past, connection with schools has helped recruit youngsters to the hobby, and the benefit of using

Aquarian. David Ford has set-up several school aquaria over the years. This latest connection is by Peter Burgess with QED and covers the education curriculum for teachers, with a video and a certificate of competence for pupils.



**AQUARIAN**

## Certificate of Fishkeeping

*This is to certify that*

\_\_\_\_\_

has successfully fed the fish  
and maintained the school aquarium  
over a period of \_\_\_\_\_ days

***I recommend that they are now  
capable of keeping fish of their own***

*Congratulations*

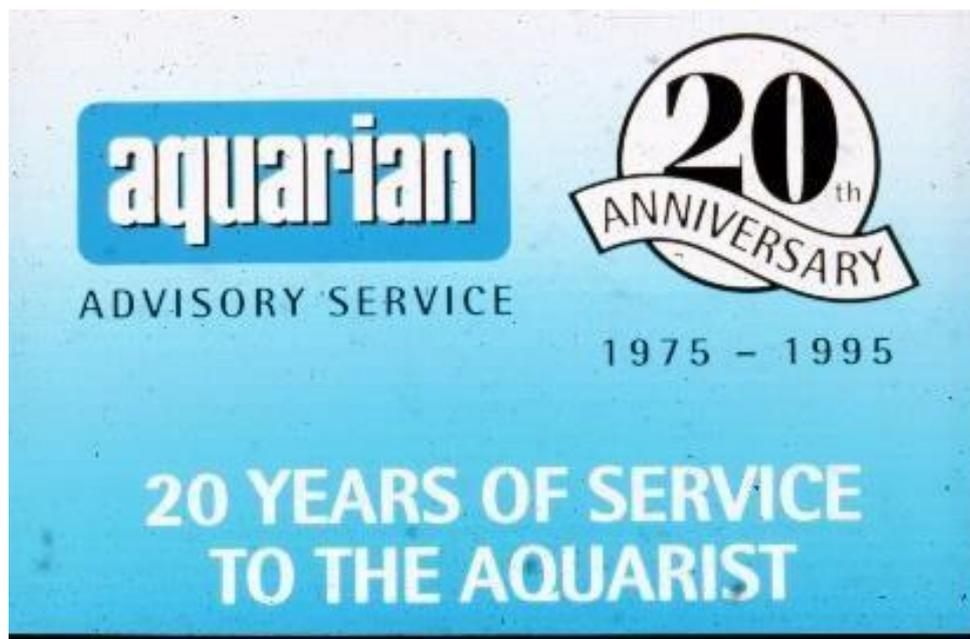
Signed (Name) \_\_\_\_\_

Date \_\_\_\_\_

School \_\_\_\_\_

If you are interested in keeping fish talk to your local aquatic store  
who will give you the help and advice you need to get started.  
The voucher below will enable you to save 50p on Aquarian® Flake  
Fish Food any size or variety from participating retailers.  
Use before 30th December 2000.

It is now the year 2000, with all the celebrations of a new millennium. Aquarian had celebrated each milestone in its career with new lecture themes.....





.....and marketing 'freebies' such as engraved pens, watches, badges:





T-shirts and baseball caps were very popular: worn by top aquarists, show winners and many aquashop staff. Aquarian logo ties and ladies scarves were often part of a winner's prize pack. The most popular were Aquarian towels, especially by 'Showers' who used them to polish their show tanks. With a 1975 launch, Aquarian celebrated 25 years during year 2000 so a special commemoration was needed. David Ford was also

well past retiring age and he decided to hand over responsibility for the Advisory Service to Peter Burgess. It was therefore decided to hold a joint party for the UK's top aquarists for David's retirement plus a silver jubilee for the Aquarian brand.

This invitation was sent to hundreds of Aquarists – hundreds came too.....

**AQUARIAN<sup>®</sup>**  
**25 YEARS Superior Nutrition**  
 for fish

The manufacturers of Aquarian<sup>®</sup> Flake Fish Food  
 request the pleasure of the company of \_\_\_\_\_

at a reception to celebrate the 25th Anniversary of the launch of Aquarian<sup>®</sup> Flake Fish Food  
 and to mark the retirement of Dr. David Ford, Senior Consultant to The Aquarian<sup>®</sup> Advisory Service.

Reception to be held on Friday 7th July 2000, 7.30pm  
 at the Posthouse Hotel, Clifton Village, Brighouse, Halifax  
 telephone 0870 400 9013.  
 (See location map on reverse)

**rsvp**

Please detach and return  
 the section below to:  
 Aquarian<sup>®</sup> Reception, c/o QED  
 15 Manchester Road, Wilmslow,  
 Cheshire SK9 1BQ  
 telephone 01625 417700

PLEASE COMPLETE AND RETURN THIS SECTION IN THE STAMPED ADDRESSED ENVELOPE PROVIDED

Name \_\_\_\_\_

I/We will be attending  
 I/We will not be attending    Number attending \_\_\_\_\_

**AQUARIAN<sup>®</sup>**  
**25 YEARS Superior Nutrition**  
 for fish

QED built a special stand, used for the rest of that year at the major fish shows.



Memorabilia over the 25 years were displayed on the walls and tables.

Many adverts were photographs of the aquarists invited to the party.

Product ranges from 1975 to 2000 were also displayed.



Some of the many top aquarists at the party.





There were free drinks all evening, a sumptuous buffet, even a string quartet, with B&B at the hotel for everyone. Lots of speeches too and retirement presents for David Ford.

Everyone received an engraved Aquarian silver clock.

Aquarian's early marketing managers attended from Pedigree

Masterfoods and Thomas's top management too. The last talk was by David himself with tales of the fun of fishkeeping – and the excellence of Aquarian, of course.



The Dot&Dave team celebrate.

USA Consultant Ray 'Kingfish' Lucas was brought over from America.



Dick Mills of FBAS presents David with the Gold Pin award of the FBAS and Graeme Butt, Aquarian's longest serving Marketing Manager brought greetings from Pedigree Masterfoods.





The Aquarian global manager, Thomas's Ron Hillcoat congratulates David. Ron has been associated with Aquarian for almost as long as David – when Aquarian sales faltered it was always 'Ron to the rescue'.

Dot&Dave and the many retirement presents ranging from mounted poems (from America's Aquatic Maestro) to an iMac computer (from Thomas's).



There were articles about the party in the aquatic press because all the editors were invited, giving plenty of useful publicity for Aquarian

**AQUARIAN and Dr David Ford  
25 YEARS SUPPORTING  
THE FISHKEEPING  
HOBBY AND BUILDING  
A BRAND**



# AQUARIAN® nets 25 years of success

AQUARIAN®, the UK's leading brand of flake fish food, swims into silver position this year as it celebrates its 25th anniversary. Manufactured at Thomas's Europe and marketed by Pedigree Masterfoods, AQUARIAN was launched in 1975 with a revolutionary formula that provided a superior level of nutrition in a recipe fish preferred.

Much of AQUARIAN's success, believes UK brand manager, Paula

Hutchinson, is due to the expert support the brand has given to fish keepers – be they novices or top aquarists.

For example, goldfish are an ideal first pet for young people, being inexpensive to buy and keep. To encourage young people to consider a goldfish, the brand has invested in a number of initiatives such as producing special packs for schools to encourage teachers to use fish tanks as a basis for science lessons.

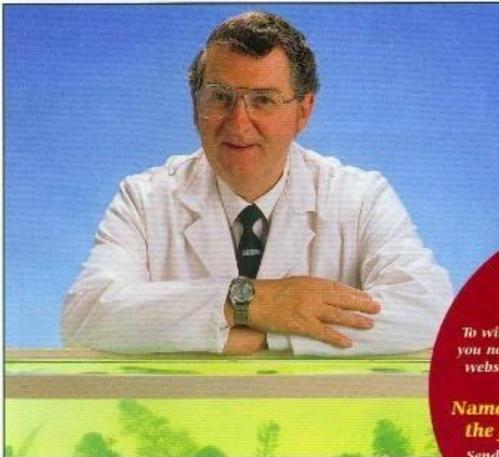
And Sealife Attractions across the country have been installed with displays and interactive games to help introduce the fun of fish keeping to children. The Sealife Attractions not only recommend AQUARIAN but also feed it to all their fish, including sharks and stingrays, to supplement their diet.

A new AQUARIAN website ([www.aquarian-fishcare.com](http://www.aquarian-fishcare.com)) has also recently been launched to support the needs of fish keepers – from the absolute novice to specialist fish clubs and societies. The future for



AQUARIAN in the UK is very exciting,' says Paula. 'With all the excellent activity taking place this year and the new developments planned, the next 25 years should be even more successful than the first!'

And it's not just in the UK that AQUARIAN has seen success, as Ron Hilcoat, European brand leader points out: 'A major launch in America in 1999 with national distribution gained through strategic partner Aquarium Pharmaceuticals Inc, and planned launches throughout Europe are evident of the business's ongoing commitment to the brand.'



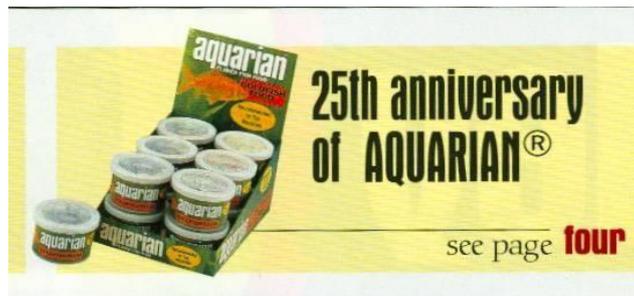
**OTHER FISH TO FRY:** AQUARIAN's 25th anniversary also saw the retirement of Dr David Ford who led the research and development team which created the unique recipe, and who was the senior consultant to the AQUARIAN Advisory Service

## WIN a singing fish on the net

To win one of three singing fish (we kid you not) surf your way to the AQUARIAN website and fish out the answer to the following question:

**Name three of the six subjects in the fishcare section of the site**

Send your answer via internal mail to Paula Hutchinson at Waltham by 23 October 2000. The first three correct entries pulled out of the tank will win



# News round

## David Ford retires - nothing changes!

He's more popular in fishkeeping than the Queen Mother and has had more comebacks than Gazzer, but he talks infinitely more sense than a footballer and never breaks a limb while trying to foul you.

He once took a (real) skeleton for a ride in the front seat of his car as he drove to a fish show, and when he tells you about avoiding disasters with fish tanks he writes from personal experience.

He's the star of TV, video, radio, lecture hall and club shed, the man they couldn't stop, the guru of modern

fishkeeping, and the youngest pensioner in Yorkshire.

Editor Steve Windsor attended his 'retirement' party (which doubled as a celebration of 25 years of 'Aquarian' flake) and found **Dr David Ford** in sparkling form, still passionate about the food which he developed in the early 70s. ("It's made from mushy peas y'know...")

"I can't imagine why anyone feeds anything else" he said, frequently, between accepting a huge range of gifts including a customised cover "from the staff and readers of PFK".

There were a few joke tasters on the cover but the most important message was tucked away at the top - "We just want to say thanks very much..."

"Dave's delight in the evening shone through. He was especially pleased with Aquarian's presentation of new computer kit," said Steve. "Dave is modern in every way and no-one has embraced the age of e mail, websites and computers with more enthusiasm. "I owe him a personal debt - when I took over PFK he was the first to call and offer me any help I needed."

"Remember that for the fishkeeper,

nothing has really changed. Dave will still be a consultant to 'Aquarian', be at all the shows, will still visit clubs and lecture no doubt, and will still write for PFK and answer queries. He's only dealt with 100,000 to date..."



Bowing to the master...

## Aquarian celebrations



**Pedigree Masterfoods, manufacturers of Aquarian Flaked Fish Food, recently marked two significant milestones for the brand with a formal reception. Launched in 1975, it was the 25th anniversary of the brand – now UK Flake brand leader.**

The anniversary was also the date that Dr. David Ford (left) chose to retire as senior consultant to the Aquarian Advisory Service.

In the early 1970s it was Dr. Ford who led the research team that developed the Aquarian range of Flaked Fish Foods. Dr. Ford later went on to set up the Aquarian Advisory Service becoming its Senior Consultant.

Taking over as Senior Consultant is Dr. Peter Burgess who has spent the last two years working alongside Dr. Ford to ensure a smooth transition.

The monthly Practical Fishkeeping magazine produced a spoof front page.

One of many jokes – because fishkeeping is fun.

**Practical**

We just want to say:  
"Thanks for everything!"

2000 - 25 years  
AN **emap** PUBLICATION

# Fishkeeping

Dr David Ford - all you need for thriving fish

## Dave hangs up his net

The thinking fishperson's crumpet leaves thousands in tears



My 25 year diet of flake food...

How to umpire a water test...



## Fishkeeping guru's amazing true confession

"I filled this myself - you can tell by the colour of the water..."

Get ahead, get a ponytail - fashion tips from a fishkeeping legend

Another one was the fact of David's retirement. Having already retired

from Thomas's, this was a second retirement party. It was agreed that Dr Peter Burgess would take over the Advisory Service, but David would remain a consultant to help Peter. Hence, one day, David could look forward to his third retirement party.....

Post millennium celebrations, the work continued.



Peter Burgess photographs the winning fish at the National Fish Shows and collects top aquarists' names.

He contacts all the Aquarian Leading Aquarists and supplies new products for testing. He collaborates with QED to develop new Stand displays.

In fact all the good work the AAS has been doing for so many years.

Although Peter has been writing articles and books for many years, the articles are now with the title 'Aquarian Advisory Service'.

# The fish doctor



Dr **PETER BURGESS** of the 'Aquarian' Advisory Service *IS* the fish doctor. This month he investigates a case of the "shimmy shimmy shakes"...



In the USA, API promote Aquarian with their treatments range. In the UK the API range is added to the Aquarian range too. This means Aquarian is again a product range of Foods and treatments.

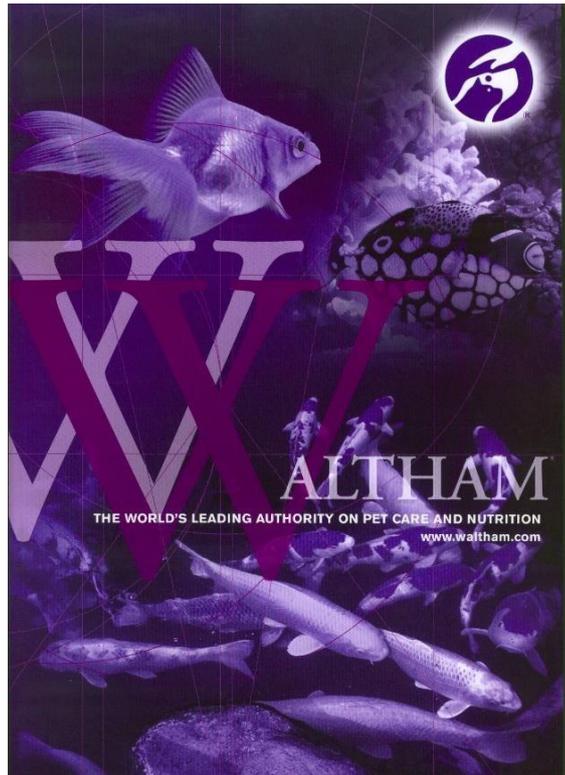
The Aquacentre is headed by Bridgette Smith, then Amanda

Hawthorne and currently Dr Abigail Stevenson, an expert in fish nutrition.

Abigail Stevenson and Technician Steve Priestley (with Peter Turner in the background) working on basic nutrition.



The  
Aquacentre  
researches are  
published in a  
manual on fish  
nutrition.



One of Steve's jobs is to collect fish  
droppings....for research, not  
cleaning.



Collecting faeces for digestibility studies at the WALTHAM® Aquacentre.

Abigail and Peter are also featured in Aquarian nutrition advertising.



**Dr Abigail Stevenson, fish nutritionist and head of WALTHAM's Aquacentre**

**The fish doctor, Dr Peter Burgess says...**

"When it comes to maintaining healthy fish, good nutrition is as important as proper water conditions. Feeding a poor quality diet to fish may result in various health problems, such as stunted growth, skin and fin ailments, cloudy eyes, and other illnesses. So its really important to always give your fish the best foods available."





In the year 2000 Aquarian developed a Website (via Sense Ltd. of Leeds, Yorkshire).

Initially it was 'aquarian-fishcare' but eventually shortened to [www.aquarian.com](http://www.aquarian.com)

# Visit the Aquarian website... ..and win a computer



The new Aquarian® website has been specially created to support and promote the fish-keeping hobby with practical help and advice for beginners and special features for experienced fishkeepers. And now, as part of the Aquarian® 25th Anniversary celebrations you can win the latest iMac computer to surf the net.

## How to Enter

You can enter the competition either by completing and returning the coupon below or by completing the special entry form on the Aquarian® website: [www.aquarian-fishcare.com](http://www.aquarian-fishcare.com)

In either case you will need to answer three questions, the answers to which can be found within the Aquarian® website. Then complete the tie-breaker in an apt and creative way.

If entering by post send your entry to:  
QED, AQUARIAN® COMPUTER COMPETITION  
15 Manchester Road, Wilmslow,  
Cheshire, SK9 1BC to arrive no later than  
December 5th 2000.

## Rules

All entries must be on official entry forms, no photocopies will be accepted, or on the special entry section of the Aquarian website. One entry per household. Illegible entries will not be accepted. No responsibility will be taken for entries lost or damaged. All entries will become the property of Pedigree Masterfoods on posting.

The competition is open to anyone 16 years and over. Entrants under 16 must have their parents or guardians consent to enter. Employees, relatives or agents of Pedigree Masterfoods (A Division of Mars UK Ltd.) and their associate companies are not eligible to enter. The prize is non-transferable and no cash alternative will be offered. The promoter reserves the right to substitute prizes to the same value as that offered.

The prize, an iMac computer, will be awarded to the person who correctly answers the three questions and who completes the tie-breaker in the most apt and creative way. Closing date for receipt of entries, 5th December 2000. The winner's name will be available from the Promoter after that date, please send a SAE marked AQUARIAN-Computer Competition Winner to: QED, 15 Manchester Road, Wilmslow, Cheshire SK9 1BC. All entries are subject to the above rules. The decision of the judges is final and binding and no correspondence will be entered into.

Photos: Pedigree Masterfoods (A Division of Mars UK Ltd.), Wilmslow in the Words, Ltd. LE14 4BS.  
© Registered Trademarks: © Pedigree Masterfoods.

[www.aquarian-fishcare.com](http://www.aquarian-fishcare.com)

**AQUARIAN®**  
**25** YEARS  
Superior Nutrition  
for fish

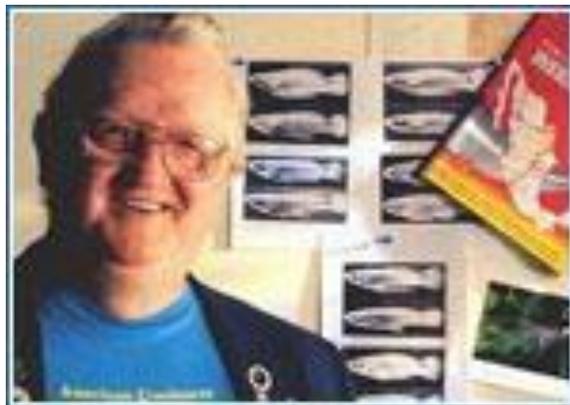


The site has become very active and the Advisory Service has an email help line (run by Dr David Ford).

The site carries articles by Dr Burgess and hobbyists as well as product information.

Aquarian has sponsored several fish-collecting trips where conservation work is involved. The site carries information on these trips. For example – the Mexican Fish Ark project where Aquarian Leading Aquarist Ivan Dibble visits Mexico to save endangered Livebearers.

Ivan Dibble (of 'The Ark' conservation group) has recommended Aquarian for many years.



Dr Burgess has saved Guppies from Trinidad, the late Derek Lambert (editor of Today's Fishkeeper) made two trips to Mexico, Dr David Sands has collected from the Amazon and conservation collections by Public Aquaria such as Bristol and London Zoo Aquarium were sponsors.

**aquarian**

AYUDA A SALVAR ESPECIES EN PELIGRO

DE EXTINCION EN UN ZOO DE ESTADOS UNIDOS



*Psychrolutes orthostomus*

Los responsables del Complejo Acuático Johnson del Zoo de Columbus informan de que una marca comercial de alimento para peces, AQUARIAN, ha contribuido a devolver la salud a algunas de las últimas colonias existentes de ciclidos haplocromina.

"Llevo más de 25 años criando ciclidos y nunca he visto algo así. Los peces debían mantenerse vivos, pero se estaban muriendo y no entendíamos por qué." Así lo explica Sandy Andromeda, Jefe del Complejo Acuático Johnson del Zoo de Columbus que, en un importante programa internacional de reproducción en cautividad, había conseguido dos colonias de ciclidos haplocromina (*Psychrolutes orthostomus*, *Prognathochromis perrieri*) del Lago Victoria del Acuario de Nueva Inglaterra en febrero de 1989. Era imprescindible lograr criar a los ciclidos haplocromina en cautividad puesto que estas especies únicas ya se creían extinguidas en su estado natural.

El Lago Victoria alojaba originalmente a más de 300 especies endémicas incluyendo los ciclidos haplocromina. Hace unos 30 años el gobierno introdujo la perca depredadora en el lago en un intento de crear una nueva fuente de alimentación rica en proteínas. Desde entonces, el lago ha sufrido un catastrófico deterioro ecológico y sus colonias de singulares especies se han visto diezmadas hasta el punto de encontrarse muchas de ellas en inminente peligro de extinción.

#### PROBLEMAS DE SALUD AMENAZARON EL PROGRAMA DE COLUMBUS

Andromeda ya esperaba que algunos ciclidos murieran al principio debido al estrés causado por el cambio de entorno. La reconocida técnica que se aplica en estos casos consiste en dar dosis concentradas de vitaminas y minerales, no parecía ayudar a los peces a adaptarse a su nuevo ambiente. Al cabo de un año, los peces seguían muriendo.

Los expertos en acuariología de Columbus no tenían pruebas científicas de que los ciclidos sufrieran una deficiencia dietaria, pero a falta de cualquier otra explicación, Andromeda consultó a un proveedor local de alimentos para peces para que le indicara un suplemento vitamínico y mineral. Dicho proveedor le recomendó AQUARIAN, un alimento en copos para peces que es líder en el mercado del Reino Unido y está cobrando cada vez mayor aceptación entre acuariófilos de muchos otros países.

#### EFFECTOS RECONSTITUYENTES DE ALIMENTACION CON AQUARIAN

Los resultados del nuevo programa de alimentación de Andromeda fueron, sin lugar a dudas, excelentes. A lo largo de un periodo de dos a tres meses, el índice de mortalidad de los ciclidos cautivos empezó a disminuir y finalmente se detuvo por completo. Al mismo tiempo, los responsables de Columbus observaron mejores resultados en su programa de reproducción. En la actualidad, los peces se mantienen muy saludables con una dieta normal de AQUARIAN.

Los nutricionistas de peces de WALTHAM Aquacentre, Inglaterra, han desarrollado AQUARIAN para proporcionar una nutrición superior. Los copos son apetitosos, fácilmente digeridos y una gran parte del alimento se convierte en crecimiento y energía. Por consiguiente, se generan menos residuos y desechos lo que resulta en una menor contaminación del agua y reducido estrés entre los peces. La receta especial de AQUARIAN también evita la malnutrición de los peces de 'alimentación de fondo', asegurando que les llegue la cantidad necesaria de nutrientes esenciales para su salud.



Sandy Andromeda

Los responsables del Complejo Acuático de Columbus creen que una dieta mejorada de AQUARIAN ayudó a reactivar el sistema inmunológico de los ciclidos con espectaculares resultados.

Desde el restablecimiento de las colonias de ciclidos, el Complejo Acuático Johnson del Zoo de Columbus ha organizado juntamente con la Universidad del Estado de Ohio una conferencia internacional sobre ciclidos del Lago Victoria. El Complejo ha obtenido asimismo el Premio al Logro Significativo otorgado por la Asociación Americana de Parques Zoológicos y Acuarios, además del Premio a la Conservación Acuática 1990 ofrecido por la revista 'Today's Aquarist'.

El éxito obtenido con los ciclidos del Lago Victoria ha llevado a Andromeda y su equipo a extender los alimentos AQUARIAN en copos a muchas otras especies del complejo.

El uso de AQUARIAN se extiende cada día en los zoológicos de todo EE.UU. y Europa.

**MEXICO**

**'aquarian'®**

**Endangered  
Species Expedition**

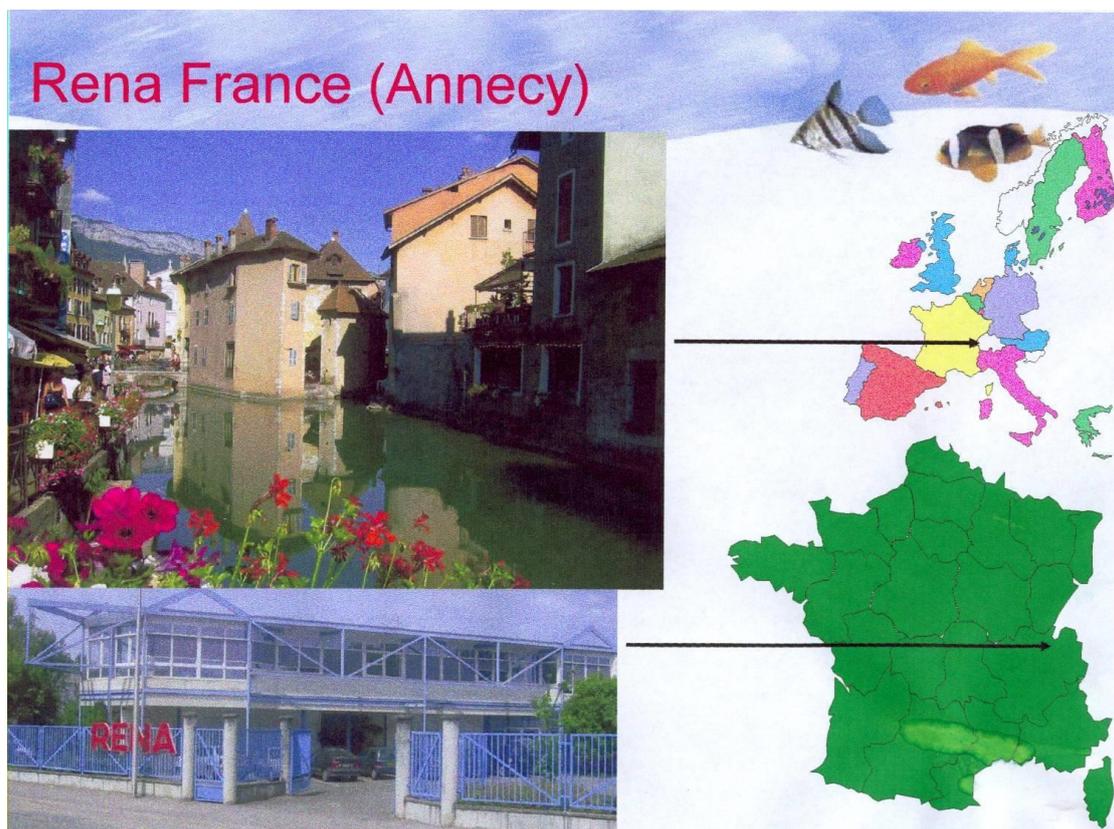
*Part 1*

**Bad News . . .**

**Good News**

**Derek and Pat Lambert set off on a two-stage  
expedition into livebearer country.**

From year 2001 to 2003 (and the 30<sup>th</sup> year since Mr Mars declared ‘I want a fish food’) the Aquarian brand became very important within the Mars group. The French company Rena was purchased, then API acquired, making the brand a Global Fishcare unit with foods, remedies and equipment – the wheel has turned full circle.





In the beginning, the focus at Aquarium Pharmaceuticals was on the development of tropical fish medications. That was back in 1965. Today we are an industry leading manufacturer and international supplier of a complete line of aquarium and pond products. We manufacture and sell more than 170 products across many different product categories. In addition to medications, our product line includes water conditioners, water test kits, carbon and filtration products, algacides, aquatic plant products and aquarium accessories. We produce just about everything to meet the needs of aquarium owners and pond keepers.



#### **Continual Product Development is the Key to Our Success**

Growth at Aquarium Pharmaceuticals has been driven by an emphasis on research and development. With over 150 experimental aquariums and ponds in our state-of-the-art research laboratory, Aquarium Pharmaceuticals is dedicated to developing innovative new products. Since the company's inception, we have led the industry in the area of creative thought and innovation, receiving numerous patents for outstanding products. At Aquarium Pharmaceuticals, our goal is to provide hobbyists with the products they need to succeed.

The Aquarian Range was also increased over this period with familiar products reappearing but with new improved recipes from work by Waltham Aquacentre and Masterfoods R&D.

## New foods from Aquarian

Aquarian has recently launched a new range of foods to complement its very popular Tropical, Coldwater and Marine flake foods. The six new foods are aimed at tropical and coldwater fishes.

Herbivore Flake Food consists of a mix of fish meal, cereals, vegetable derivatives and algae including kelp. Colour Flake Food is based on Marigold meal (from those brightly coloured orange flowers) and is said to be a rich natural source of carotenoid pigments that enhance colour.

Growth Flake Food is a very fine, crumbled food for boosting growth in young fishes and has a 45% protein content.

The Catfish Tablet Food consists of large (approximately 12mm) tablets of compressed flake food which can be pressed

against the glass or dropped into the tank. They can be fed whole to larger fish.

The new range also includes two pelleted foods, one for cichlids and one for goldfish. These foods have a dispenser in the lid to prevent too much food being poured out.

All foods have added vitamins and minerals and, as you would expect from Aquarian, are based on well-researched recipes.

We've been testing the foods on our own fishes this past month and they seem to have gone down very well - they even seem palatable to Matt's fussier cichlids.

> For more information, contact Masterfoods on 01664 410 000.



Rena, API and Aquarian, with all these new products, came together as Mars Global Fishcare at a new office in Southall, Middlesex in 2003:

Here are Associates Les Bunce, Liz Clayton-Jones, Cyril Geoffray, Lyn Orman, David Watson, Lisa Walsh, Graeme Stuart & Kate Jones



Ron Hillcoat retired (like David Ford – yet again) and the Global Fishcare Manager became Rick Vlemmiks of Rena France. The UK team (shown above, plus Simon Johnson and Michael Pearce) setup shop in the Pacemaker Unit at the International Trading Estate in Southall. Financial control moved from Masterfoods to Rena France as Aquarian became an independent Unit within the Mars Group. The UK Aquarian Manager is now Kate Jones.

*This has been the 30-year history of a Mars Brand.*

From its concept by Mr Mars in 1973 to its Global Fishcare range of 2003 the success of **AQUARIAN** © is not just the excellence of its properties – which are without parallel in the world of fishkeeping – but all the efforts of its devotees, from Mars Associates to Leading Aquarists.

Although 30 years old, the brand has entered a new era...reborn and destined to be as important to the consumer as Mars, M&Ms, Dolmio,

Whiskas or Chum, or any of the other famous names from the Mars family.

Later - Now at over 40 years – the Aquarian brand remains the UK's most popular fish food. Because it is the best.



## Appendix 1

### **Books published by Dr David Ford that promotes Aquarian:-**

#### **Author**

‘Spotter’s Guide to Aquarium  
Fishes’ Usbourne Pocketbooks  
ISBN 0 86020 457 X (1980)

‘Feeding Aquarium Fishes’  
Ringpress Ltd., ISBN 1 86054 255  
7 (2002)

#### **Editor/Author**

‘The Diseases of Ornamental  
Fishes’ Waltham Symposium No.3  
ISSN 0022-4510 (1980)

## **Co-Author**

‘Complete Book of Tropical Fish’

Ed: Keith Sagar

Cathay Books ISBN 0 86178 581 9  
(1978)

‘Aquarium Systems’ Ed: A.D.

Hawkins

Academic Press ISBN 0-12333380-  
6 (1981)

‘Pets & Companion Animals’ Ed; Dr  
Peter Messent

Torstar Books New York ISBN 0-  
920269-87-7 (1986)

‘Fishkeeping & the Doctor’s Waiting  
Room’ in

The Royal College of General  
Practitioners Members’ Reference  
Book

Sabrecrown Publishing ISSN 0262  
9275 (1990)

‘Practical Animal Handling’ Ed: R.S.  
Anderson & A.T.B. Edney  
Pergamon Press ISBN 0-08036151-  
X (1991)

‘Manual of Ornamental Fish’ Ed:  
Ray L. Butcher  
British Small Animal Veterinary  
Association ISBN 0 905214 18 8  
(1992)

‘A History of Tropical Marine  
Fishkeeping in the U.K. 1960-1980’  
Ed: Gerald Jennings, Calypso  
Publications, London ISBN  
0906301 99 8 (1999)

## **Articles**

There are 300 on file from 1978 to

2003 that promote Aquarian

### **Travel Series III**

The 20 Million Dollar Aquarium –  
December 1981

A Trip Aboard the Glass Bottomed  
Boat – January 1982

Coney Island Fish – February 1982

Fish on a Mountain Top – March  
1982

Uncle Sam's Place – April 1982

Treasure in the Vaults – May 1982

### **The Why? Series**

Underwater Disco – November  
1984

Why are Marines Different –  
December 1984  
Deadly Soup – January 1985  
Why Remedies Fail – March 1985  
Why Filter – July 1985  
Why Won't it Go – March 1986  
Why is my Pond Green – August  
1986  
Right First Time – October 1986  
Why Won't they Grow – November  
1986  
Why Aerate – December 1986

## **Information Series**

Going up in the World – February  
1987  
Meeting of the Waters, The  
Paludarium – September 1987  
Snail Trail – November 1987  
Pump up the Volume – January  
1988  
Pure Gold – February 1988

Fact & Fantasy – March 1988  
Jazz up your Pond – May 1988  
Larger Than Life – June 1988  
Flying Fish – August 1988  
A Roof over Their Heads –  
September 1988  
Razzmatazz 1988 FAAS  
Convention – October 1988  
Goldfish – The Story so Far –  
February 1989  
A Pond Naturally – March 1989  
Ford's Folly – April 1989  
Green Comes Clean – August 1989  
The Answer is Here – November  
1989  
Home or Office Aquariums –  
October 1990  
Community Quiz – December 1990  
How Old is that Fish – February  
1991  
Is Your Water Killing Your Fish –  
April 1991  
Bringing up Baby – June 1991

Colour Communicates – July 1991

Which Remedy – August 1991

AquaChamp Quiz – December  
1991

A Spineless Lot in Freshwater –  
February 1992

Green Beginnings – June 1992

Heat up and Cool Down – August  
1992

The Caviar Connection – October  
1992

Just Champion Quiz – December  
1992

Club Together – March 1993

An Ideal Killifish – June 1993

A Cure for Cracking Ponds –  
August 1993

The Great A to Z of Fishkeeping –  
July 1994

Fifty Years of Fishkeeping –  
January 1995

## **Certificates in Aquariology**

Educational articles on pH, Hardness, Redox, Aquarium Design, Aquatic Bacteria, Fish Selection, Coldwater Fishes, Filtration, Biology of the Fishes, Homeopathy for Fishes, Maintenance - January 1996 to October 1996

## **Nutrition Series**

Focus on Fish Foods – January 2003 to March 2003

## **Ford's Fishes Series**

From April 2001 to December 2002, 12 articles with in-depth studies of: The Molly, the Headstander, the Platys, the Neons, the Blind Cave Fish, the Tiger Barbs, the

Harlequin, the Goodeids, the  
Angelfish, the Gourami, the  
Kribensis and the Red Devil

Aquarist & Pondkeeper (now  
Today's Fishkeeper) magazine

Oh, no, not Another – March 1987

5-Million Gallon Aquarium –

September 1987

Fishkeeping in Yorkshire –

September 1987

Water is H<sub>2</sub>O plus – January 1988

A Pond Filter for Every Need – May

1988

Heat That Water – September 1988

Invertebrate Diets – November

1988

Favourite Egglayers – February

1989

Favourite Goldfish – April 1989

Bacterial and Viral Disease –

October 1989

International Cichlid Conference –  
December 1989

Aquarium Accessories – February  
1990

Life with Charlie... - April 1990

Diseases, Nutrition – August 1990

Stocking and Maintaining a Pond –  
April 1991

Ten Golden Rules for Koi – August  
1991

The What, Why and How of  
Marines – February 1992

Tackling Finnick Feeders – March  
1992

Stock in the Pond – June 1992

The Summer Pond – July 1992

Step by Step Guide – October 1992

A Fish is not just for Christmas –  
December 1992

Top Ten Tropicals – January 1995

Cichlid Conservation – February  
1996

Planning for Koi – April 1996

Planning the Tropical Aquarium –  
February 1997  
Fishworld'97 – October 1997  
The Slow Leaking Pond – June  
1998  
Fish Nutrition – September 1998  
Akwarystyka Polska (Polish  
fishkeeping) – February 1999  
Reverse Osmosis – October 1999  
Swim with Petfish – November  
1999  
Lighting the Way – July 2000  
A Goldfish is for Life – December  
2000  
Commercial Diets – February 2001

## **Other Publications**

Too numerous to list, but articles  
that included Aquarian promotion  
were published in The Water  
Gardener, Aquarium, You and Your  
Vet, Wild about Animals, Daily

Telegraph, Daily Mail, The Observer, The Angler, etc. Also many Fish Club magazines published reprints.

Many of the major series (such as Ford's Focus and Certificate series) were republished in Spanish, French, German and Japanese aquatic magazines.



Dr. David Ford

**“Mein Auftrag Im Jahre 1973:  
Entwickeln Sie Eine Ausgezeichnete  
Flockennahrung Für Fische”.**



#### LA CREATION DE AQUARIAN

C'est en 1973 que le groupe Mars prit la décision de fabriquer une alimentation spécifique pour les poissons d'ornement. David Ford fut choisi pour étudier et lancer cette opération. Le choix était judicieux : D. Ford combinait 10 ans d'expérience dans le département Développement de produits et pas moins de 25 années d'expérience comme aquariophile convaincu.

L'objectif qui lui a été assigné était précis. A partir de zéro, créer une gamme de nourritures pour poissons qui, en qualité, présentation et commercialisation serait supérieur à n'importe quel produit concurrent disponible sur le marché.

*Le Dr David Ford est un chimiste et spécialiste en sciences alimentaires, qui étudia à la Trent Polytechnic et à l'Université de Nottingham. Il est le chef de Pedigree Petfoods Aquarian Studies et du Aquarian Advisory Service. Le Dr Ford vous aidera très volontiers pour tous problèmes spécifiques. Vous pouvez le contacter à l'adresse suivante : Aquarian Advisory Service, Animal Studies Centre, Waltham-on-the-Wolds, Melton Mowbrat, Leicestershire LE144RT. Angleterre.*



# Técnicas Básicas

## FILTRACION POR REFLUJO

**Por Dr. David Ford (Asesor de Aquarian)  
Gentileza de «PRACTICAL FISHKEEPING».  
Traducido por: Adolfo Jiménez (Biólogo)**

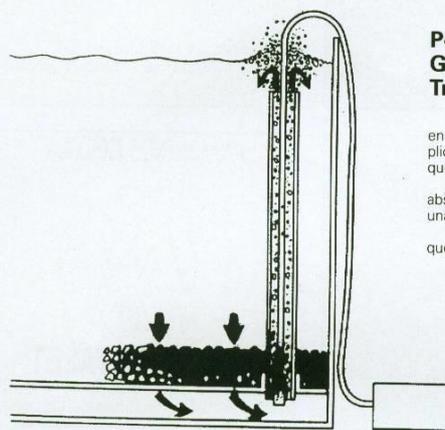
La filtración por reflujo en el sistema de filtraje del interior de la arena es en realidad algo más que un «reflujo». El verdadero sistema de reflujo implica un prefiltrado con filtro de potencia y un retorno del agua filtrada al tanque a través del tubo de elevación del agua desde el fondo.

El filtro de la arena toma agua a través de la arena en el suelo del tanque absorbiéndola a través de un tubo vertical, utilizando una bomba de aire o una eléctrica enganchada a la parte alta del tubo.

Pero este sistema tiene desventajas. La suciedad es retenida en el tanque (algo así como tener el cubo de la basura en el salón) y resulta difícil limpiar la arena. Es excelente para los acuarios marinos poco poblados, pero no tan bueno para los congestionados acuarios tropicales. Los falsos fondos pueden ser un desastre en un tanque de agua fría.

Los peces de colores producen abundantes excrementos que se acumulan en la arena más deprisa de lo que pueden descomponerlos las bacterias, así que se forman áreas sucias. Los peces suelen nadar en el fondo, hurgando en la arena buscando algo comestible. Remueven el material sucio y de esta manera se infectan, particularmente los peces exóticos de aletas largas.

El Servicio Ayuda al Acuarista ha investigado cientos de casos de problemas persistentes de podredumbre de las aletas en colas de



The Spanish connection means publication in South America too:

INFORMACION TECNICA



**FORD  
FOCUS**

El Dr. David Ford lleva respondiendo cuestiones sobre problemas en el mantenimiento de peces desde 1978 a través del servicio de asistencia de Aquarian.

En esta ocasión nos habla sobre el potencial Redox y los gases disueltos en el agua y su medición.

Después de leer estas páginas entenderéis muchas cosas ...



Hay una razón por la que la vida se desarrolló en este planeta, dice el Dr. Ford: la increíble sustancia llamada agua. En este segundo artículo, el Dr. Ford nos explica el potencial Redox, los gases disueltos y la química del agua del grifo, como siempre, desde el principio.

**MARAVILLOSA, MARAVILLOSA**

**aquarian**

**AGUA** y II

From 2003 the 'promotion by publication' was taken over by Dr Peter Burgess – his then current

series being the 'Fish Doctor' in Practical Fishkeeping.

However, both still appear monthly in the reader's questions section in several magazines:

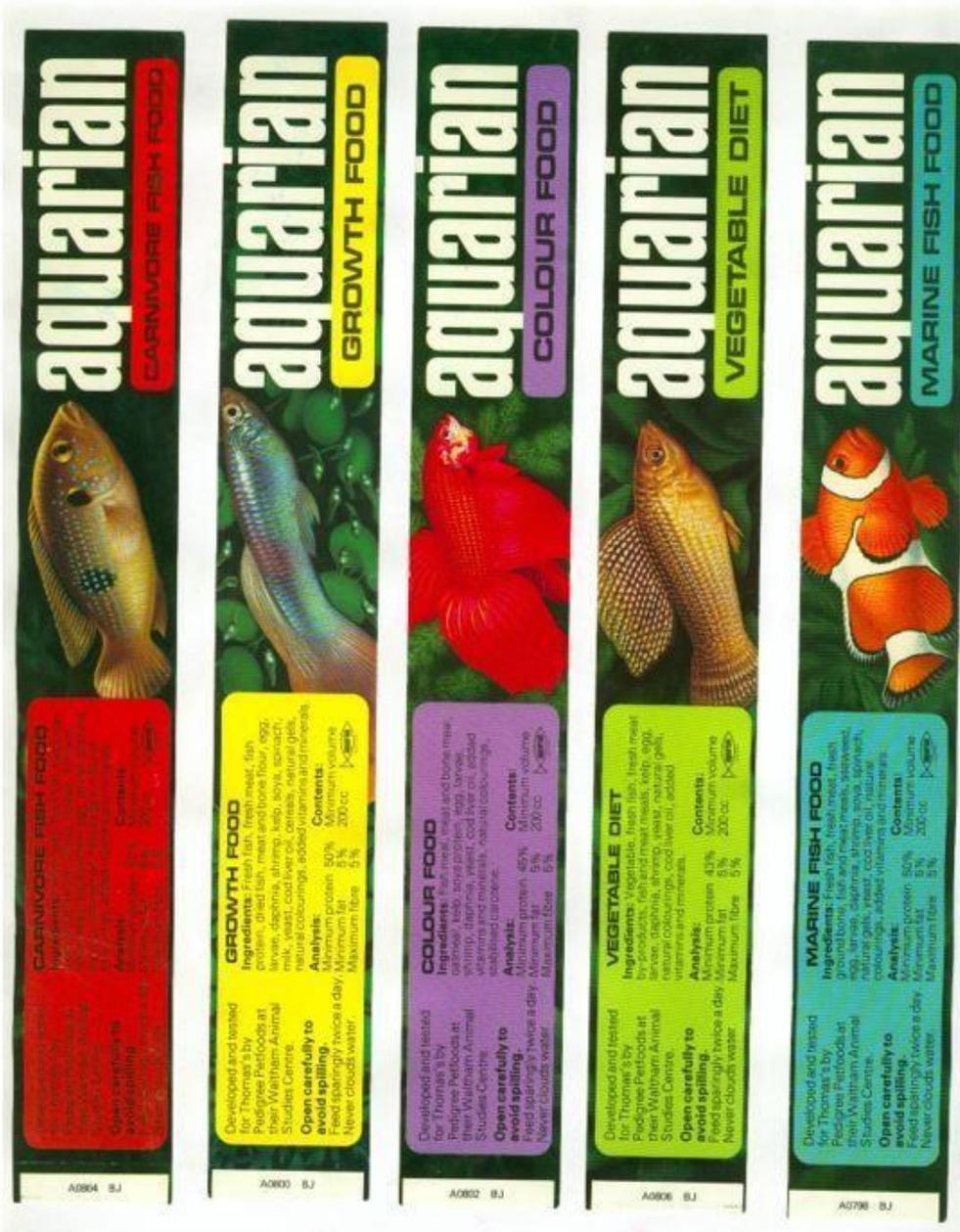
Even after 30 years the work continues..... (and now 40+).

# Tropical Answers

Our expert panel answers your tropical fishkeeping queries.  
Every letter submitted with a stamped addressed envelope gets a written reply.

	<p>Dr. PETER BURGESS answers health queries. He's also an expert on coldwater aquarium fish.</p>		<p>DEREK LAMBERT is a pro fish breeder, answering breeding and livebearer queries.</p>		<p>BERTI GESTING is an expert on aquarium plants, and the equipment for growing them.</p>		<p>Dr. DAVID FORD of 'Aquarian' answers technical and some of our Equipment Answers queries.</p>
---	--	---	--	---	---	---	--

## Appendix 2 –The Original **AQUARIAN** Labels



Launch labels 1975  
 Appendix 2 – more original  
**AQUARIAN** Labels

Launch labels 1976 – the ‘New – with Fresh Meat and Fish’ label was successfully contested by Tetra when launched in Germany and had to be removed from display. In German, the flash meant that the pot contained fresh meat and fish.



Some of the foreign labels in the





Some design variations in 1977  
Appendix 3

In 2013 Aquarian became 40 years old!

It remains the UK's top-selling fish food.

'Mars Fishcare' has divided into American and European groups. The American group is based at API, Chalfont, Pennsylvania, and they have added to the food range with granular forms. Pond foods and treatments are sold under the POND CARE® name.

The official list of the Mars Fishcare range is now: -

- Aquarium Air Pumps
- Aquarium Cleaning
- Aquarium Filtration
- Aquarium Food & Equipment
- Aquarium Medication
- Aquarium Water Testing
- Aquarium Water Treatment

Fish Foods

Fish Ornamental Coldwater, Fish  
Food

Pond Treatments

The European group is based at the Dolphin Estate, Sunbury-on-Thames and includes the Rena, France equipment manufacturers.

Thomas's has become Mars Petcare at Birstall, West Yorkshire, but continues producing the Aquarian Flaked Foods. Their full title is 'Mars Complementary Petcare Europe', producing treat foods for dogs and cats as well as fish foods.

Dr Peter Burgess continued to be a consultant, aided by Anna Robinson. She took over from David Ford in 2009: a scientist with many years of work in Aquatic

Stores and is an author of aquarium books and fishkeeping articles.

This was because David retired (again) but then formed his own Advisory Company called 'Aquatic Services' and continues to support Aquarian at Fish Club Open Shows. He is still writing articles in aquatic magazines and club newsletters. "When your work is your hobby, you do not want to stop" .....

Aquarian® and the Aquatic and Pet Trade.....

# The Mars Fishcare stand at the AQUA2013 Trade Show, Telford



And....

The Aquarian Stand at the Pet  
Products Trade Show 2015,  
Harrogate



## **Update for 2019**

**AQUARIAN® BRAND'S NEW LOOK!**

**UNITED KINGDOM – 1 May 2019**

After ten years of its classic packaging, the AQUARIAN® brand has gotten a makeover! Mars Inc. has heard the requests of consumers, and after conducting a multivariate design approach that spanned more than 12 months and included more than 4,700 potential pack designs, AQUARIAN®

will be hitting stores with its new packaging in 2019.

For more than 40 years, the AQUARIAN® brand has been a leader in the aquatic food category. While its nutritious formula has remained the same scrumptious recipe that your fish love, the producers of AQUARIAN® brand sought a refreshed packaging design to reflect changing consumer preferences. Now, AQUARIAN® tubs and pouches are more easily distinguished from competitive products while maintaining the brand's signature, vibrant blue.

“The labelling and packaging of a product is extremely important for brand success, and it was time for the AQUARIAN® brand to be modernized, while clearly communicating product benefits, to better meet the expectations of consumers,” says Karyn Cook, Global Brand Manager. “We anticipate that

consumers will appreciate and respond well to our new look.”

AQUARIAN® packaging isn't the only facet of the brand that's changing – now, AQUARIAN® food consists of a broader range of food types for a wider variety of fish, including a tropical & temperate option and a goldfish & cold water formula. In addition, the brand's website, [aquarian.co.uk](http://aquarian.co.uk), was launched in 2018, and reflects the changed aesthetic of the brand with the classic AQUARIAN® blue and a cleaner, more modern design that sets it apart from the competition. The result is a more streamlined look that fish keepers will recognize with the same great taste that fish have enjoyed for over 40 years.

The refurbished AQUARIAN® line of products will be available in stores February 2019. Be sure to look for it the next time you shop for fish food – it's

sure to jump out at you from its place on the shelf! To stay up to date on all of our new activities, be sure to follow us on Facebook and Instagram!



## ABOUT THE AQUARIAN® BRAND

The AQUARIAN® brand was developed in 1975 by Forest Mars Sr., and its nutritional formula was ground-breaking at the time in the aquatics hobby. When Mars acquired Aquarium Pharmaceuticals Inc. in 2003, AQUARIAN® merged into this global family of fish care brands, and the result has been a stronger company with a

vibrant background in fish keeping and the trusted reputation of Mars. Today, the AQUARIAN® family of brands includes treatments and nutritional products. For more information, please visit: <https://aquarian.co.uk>.

.....

An Aquarian® History Online document - updated for 2019

