

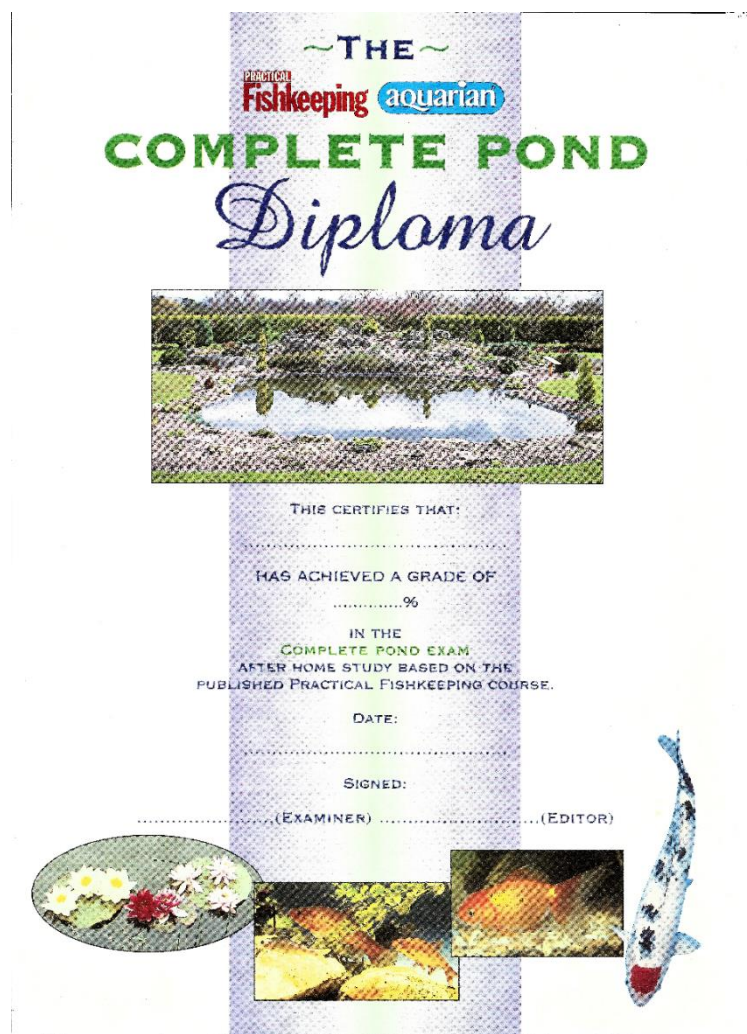


**NORTHERN GOLDFISH  
& PONDKEEPERS  
SOCIETY**  
A Nationwide Society  
**NEWSLETTER**



July 2017 – A Pond Issue

This newsletter reminds members that we are a pond society  
as well as a Goldfish one.



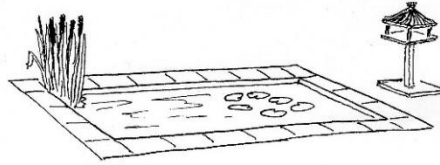
Many years ago, when working for Mars Fishcare, I ran this course on Ponds via Practical Fishkeeping magazine. Hundreds took the course, earning this diploma after taking an exam and then, hopefully, building their pond.

But what type of pond?

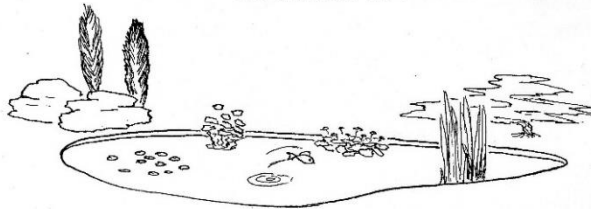
Alex Stephenson (our member in Norfolk) drew these cartoons for the Newsletter.

Here is the dozen he chose and his comments.

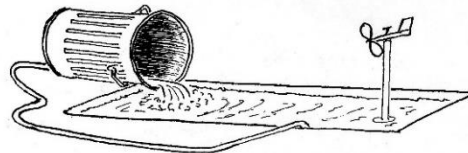
The type of pond we prefer can reflect the kind of people we are. Try some of these ....



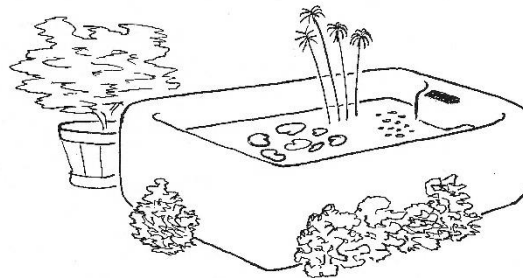
TRADITIONAL



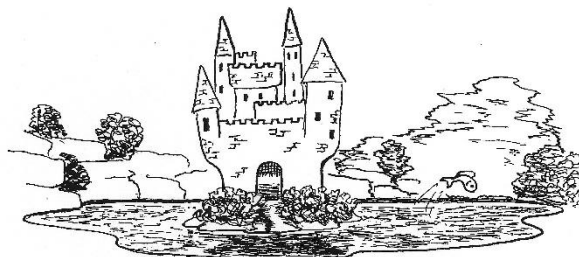
EASYGOING



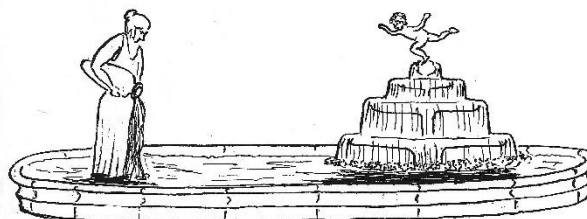
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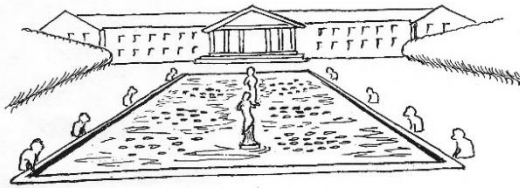
SIMPLISTIC



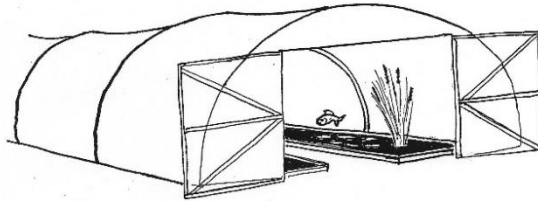
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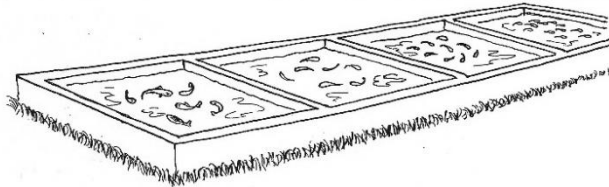
CLASSICAL



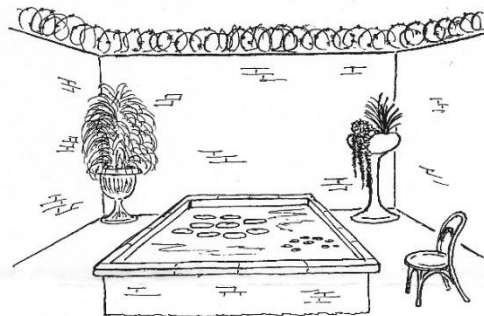
RICH



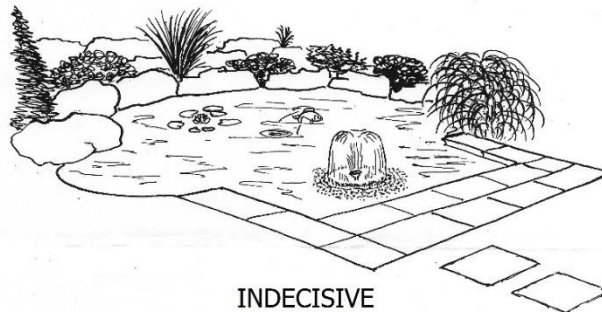
PROTECTIVE



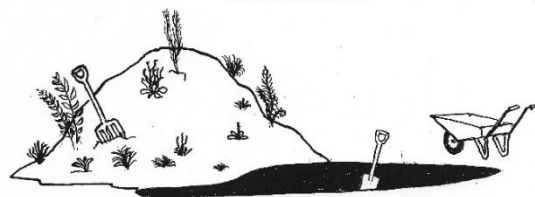
PRACTICAL



RECLUSIVE



INDECISIVE



DEFEATIST !



Whatever type of pond you chose – always remember that an average of over 300 people die by drowning each year in the UK, of these, five children (under 5) drown in garden ponds.

7



Forbid your kids to even go near your pond.

## A Pond Diploma

If you are interested – below (p4) are the questions that were asked in the PFK Pond Diploma Course. 75% needed to get a diploma. Do you really want the answers?

Q.18 – a, Q.19 – c, Q.20 – c, Q.21 – a, Q.22 – a, Q.23 – a, Q.24 – c, Q.25 – c.  
 Q.10 – a, Q.11 – a, Q.12 – c, Q.13 – a, Q.14 – a, Q.15 – b, Q.16 – b, Q.17 – b,  
 Q.1 – c, Q.2 – b, Q.3 – c, Q.4 – b, Q.5 – a, Q.6 – c, Q.7 – b, Q.8 – b, Q.9 – b,

Several hundred PFK readers sent in their answers and at 75% most passed and received their diploma by post. Only a few got 100% though and a few decided any answer would do and just ticked all the boxes. Told to try again rather than the just a 'fail'! A similar Diploma course was run for Tropicals, Coldwater and Marine fishkeeping.

I heard from a few aquatic shops that they received the diplomas as a CV when applying for a job. That was pleasing.

4 Here is the PFK page from 1997 ....



# Here are your Pond Diploma questions - take your time

1. The rate at which a pond heats up or cools down is related to:  
 a. The surface area ☐  
 b. The volume ☐  
 c. Both the surface area and the volume of the pond ☐

2. It is a good idea to carry out occasional partial water changes on a garden pond because:  
 a. The chlorine in the tapwater used to top up the pond helps to kill unwanted fish parasites ☐  
 b. Unlike natural ponds, garden ponds are virtually watertight, and a water change will help reduce waste levels in the water ☐  
 c. Water changes help to prevent duckweed and blanketweed growth ☐

3. A 'thermocline' is not found in ordinary garden ponds because:  
 a. In Britain we never get real extremes of temperature ☐  
 b. Only the medical profession uses thermoclines ☐  
 c. Ordinary garden ponds are too shallow for them to exist ☐

4. Very shallow ponds with gently sloping sides are not recommended. Which of the following reasons is FALSE?:  
 a. These ponds have a poor surface area to volume ratio ☐  
 b. These ponds have a lower oxygen content in the water ☐  
 c. Invasive marginal plants can grow into the pond quicker ☐

5. At 100% saturation with oxygen, pondwater at 25° Centigrade holds:  
 a. About a third less oxygen than pondwater at 5°C ☐  
 b. Around 20% more oxygen than pondwater at 5°C ☐  
 c. Roughly the same level of oxygen as pondwater at 5°C ☐

6. Which of the following statements is most true?  
 a. Koi ponds are best constructed in natural hollows because this is where ponds are found in nature ☐  
 b. Garden ponds are best constructed under trees because these supply valuable shade ☐  
 c. It is better to not build a garden pond in a natural hollow, because it is more likely to flood in wet weather ☐

7. Which of the following materials can be used in pond construction?  
 a. Polyethylene ☐  
 b. Ethylene Propylene Diene Monomer ☐  
 c. both a) and b) above ☐

8. Which of the following materials causes the most problem with high pH values in pond water?  
 a. Decorative limestone edging ☐  
 b. Fresh cement mortar ☐  
 c. Peat in planting soil ☐

9. Which of the following provides the greatest level of safety in pond electrical installations?  
 a. A miniature circuit-breaking fuse in the house fuseboard ☐  
 b. A Residual Current Device ☐  
 c. A three-core (rather than two-core) cable ☐

10. One of the main advantages of an open impeller pump is:  
 a. It is less likely to clog with solids ☐  
 b. It uses power more efficiently ☐  
 c. It can run faster ☐

11. The most accurate definition of a water pump's 'head' is:  
 a. Difference in height between the pump and the hose outlet ☐  
 b. Length of the hose from the pump outlet to the hose outlet ☐  
 c. The difference in height between the pond water level and the hose outlet ☐

12. Most UV units use a protective sleeve of quartz glass or 'Teflon' because:  
 a. Algae and dirt are less likely to build up on these materials ☐  
 b. These materials prevent electricity entering the water ☐  
 c. These materials are transparent to UV light ☐

13. A 60-watt fountain pump runs 12 hours a day, seven days a week. If the charge for electricity is 8 pence per unit, approximately how much does the pump cost to run per week?  
 a. 40 pence ☐  
 b. 67 pence ☐  
 c. 78 pence ☐

14. Which of the following statements about pond plants is NOT true?  
 a. Submerged 'oxygenating' aquatics produce beneficial oxygen all the time ☐  
 b. Plants can use up waste products like ammonia, nitrite and nitrate ☐  
 c. Submerged plants provide a large surface area for epiphytes to grow ☐

15. Photosynthesis is a process where:  
 a. Chlorophyll and water are converted into energy ☐  
 b. Carbon dioxide and water are converted to carbohydrate and oxygen ☐  
 c. Energy from sunlight breaks down carbohydrate to release oxygen ☐

16. The best soil to grow pond plants in is:  
 a. Enriched with peat and soluble nutrients ☐  
 b. A heavy loam containing some clay ☐  
 c. A sandy soil enriched with chalk and slow-release fertiliser ☐

17. The important 'planting depth' for marginals refers to:  
 a. The distance between the water level and the shelf the planting basket is placed on ☐  
 b. The measurement between the soil surface in the planting basket and the water surface ☐  
 c. The depth the plant should be placed in the soil in the planting basket ☐

18. The main advantage of biological filtration to fish is that:  
 a. The filter breaks down fish wastes ☐  
 b. The water becomes supersaturated with oxygen ☐  
 c. The water becomes clear and free of green-water algae ☐

19. There is a misprint in the 'Fish Factors' section. Which of the following is NOT a factor in the amount of oxygen entering the pond?  
 a. Photosynthesis ☐  
 b. Fountains and waterfalls ☐  
 c. The amount of fish waste ☐  
 d. The pool surface area ☐

20. In aquaculture, the fish load that a pond can safely hold is related to:  
 a. The number of inches of fish for each square foot of surface area ☐  
 b. The weight of fish per gallon of water and the average length of the fish ☐  
 c. The weight of fish, the amount of food fed and the frequency of water turnover ☐

21. The main advantage of quarantining new fish is:  
 a. It allows time for any latent disease problems to show themselves ☐  
 b. It eliminates the risk of introducing disease organisms to existing fish ☐  
 c. Neither of the above: there are no major advantages to quarantining fish ☐

22. The organisms found in the highest numbers in biological filters are:  
 a. Nitrifying bacteria which break down ammonia and nitrite ☐  
 b. Protozoa which feed on bacteria and fine waste particles ☐  
 c. Heterotrophic bacteria that break complex wastes down into e.g. ammonia ☐

23. For filter organisms to grow well in a filter they must have:  
 a. A high surface area to which to attach and a supply of oxygenated water ☐  
 b. A lightweight medium, preferably green in colour ☐  
 c. The fastest possible flow of water past them ☐

24. Koi generally need ponds with bigger filters than similarly-sized goldfish ponds because:  
 a. Koi are more messy and create more waste than most other pondfish ☐  
 b. Koi are more expensive, so a more expensive filter is needed for them than for ordinary goldfish ☐  
 c. Koi are not as hardy as other fish ☐

25. Probably the best way to keep fish healthy in a pond is:  
 a. To treat on a regular basis with medications ☐  
 b. To keep the water as clear as possible with a UV unit ☐  
 c. To maintain stable water conditions which result in the minimum of stress to the fish ☐

**When you have completed your exam paper, fill in the details below or add them to your hand-written entry.**  
**Please use the name you expect to see on your certificate if you pass the exam.**  
**Send it all to: Pond Diploma Exam, Practical Fishkeeping, Apex House, Oundle Road, Peterborough PE2 9NP.**

Name.....

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Address.....

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Postcode.....

Tel:.....

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## **This Month's Top Tip(s) – for Ponds**

One from Alan Ratcliffe – if you net the whole pond to avoid Herons, use a black mesh, not a green one. Green reflects light and makes it difficult to see the fish. A black mesh virtually disappears.

If you want to build a pond on a sloping garden – or want advice on how to repair a leaking pond, see my articles on this web page:

<http://www.drdford.com/page2.html> (Articles number 4 & 5).

## **More History**

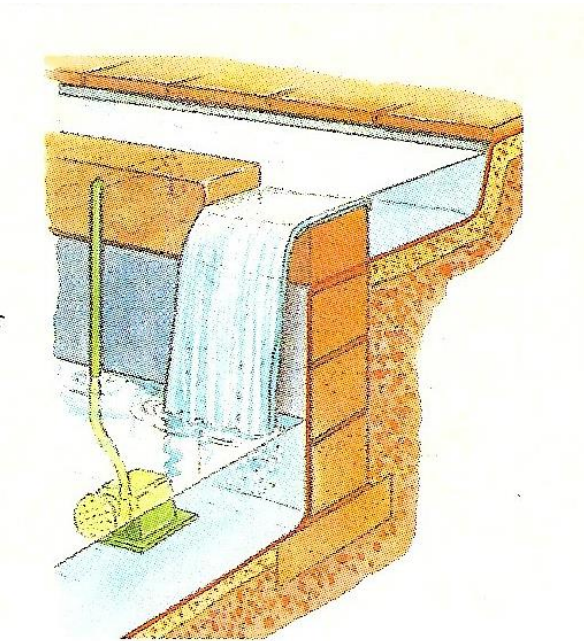
Ponds used at Mars Fishcare for nutritional research were simple plastic containers used by industry for storage. When filled with water they started to bulge! Hence the supporting frame. A simple solution for you to make instant ponds for breeding stock ...



(Yes, that is me in food factory uniform.) The three 'ponds' were on the ground, on a pallet, then two pallets. This height difference made it easy to siphon water from the top pond to all and then a bio-filter pump back to the top pond. Being plastic it was easy to drill holes, fit plastic hose fittings and connect via garden hosepipes.

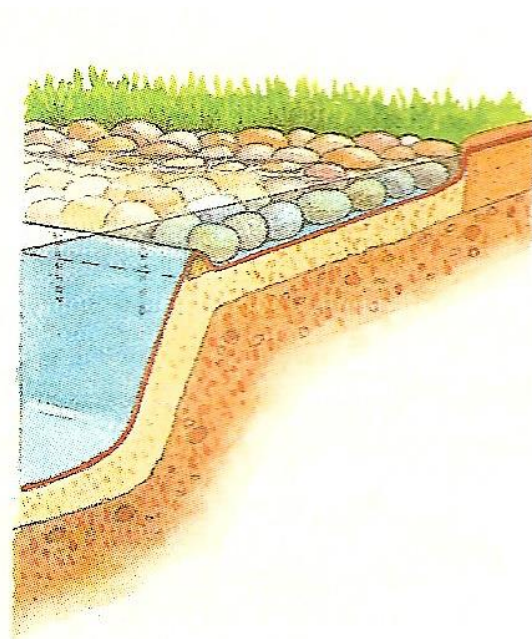
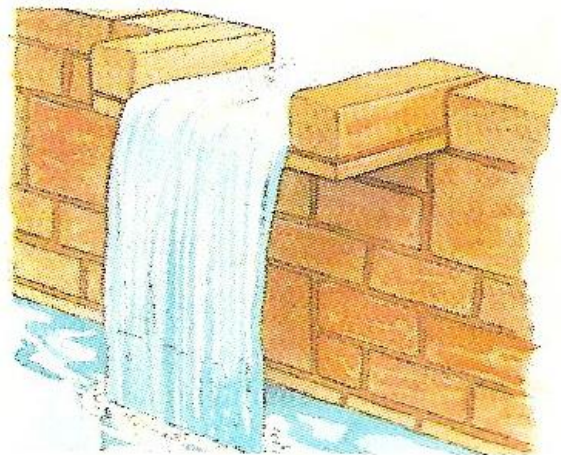
## Water Falls

If you already own a pond, adding a waterfall will add beneficial aeration.



The design depends on your type of pond, but you will need a submersible pump plus pipework – which can be hidden behind that design.

If the pump or biofilter is a separate unit, build an outflow that gives a pleasing cascade.



If pebbles are added (increases aeration as well as aesthetics) build a slight lip to prevent them washing over the waterfall.



## Another Pond

If you prefer to keep all your Goldfish in the Fish House, you could always add a 'swimming pond'. It is all the rage now in Europe – a few here in the UK (see [www.gartenart.com](http://www.gartenart.com) ). It will cost you about £90,000. Fish are not allowed in swimming ponds, but at least the water is gin-clear. They say.



## Minutes of the July Meeting

With it being an altered date meeting, most members had to send apologies.

The only message Sherridan wanted to minute was to remind members that the Open Show by NEGS that will take place on Sunday 16<sup>th</sup> of July at Redby Community Centre, Fulwell Rd, Sunderland **SR6 9QP**. Even if you are not showing please visit to support them. Plenty of free parking! You can also visit the attractive seaside of Redby just minutes away.

If you are showing, download the Entry Form from here:

[NEGS2017new.pdf](http://NEGS2017new.pdf)

Next meeting at The Church Inn will be Tuesday August 8<sup>th</sup> at 8pm.  
Nationwide members always welcome.

But please let Sherridan know if you can't make it.

