

# Setley Sail

## October 2011 - Autumn Newsletter

## Scale Captain's Chat

## He Golks.

The last newsletter of the Year !!!!! Where has all the time gone?

We have had a busy time since the last time I had a chat with you! The Lymington Lifeboat day was a well supported with 30+ boats on display. As it was advertised on BBC radio and incorporated the sailing club "Bath Race", takings collected by the RNLI exceeded £1000. The Club Exhibition in The Masonic Hall was a fantastic day, we managed to fill the hall with over 120 boats and other displays, public feedback was excellent; we raised £104 on the H4H Stall, the RNLI stall took £150, and an additional £448 in door takings and subscription buckets. We also took £100 in the Wightlink raffle for the tickets they donated as sponsorship, this will be used to offset our hall costs. A BIG THANK YOU TO ALL WHO SUPPORTED THESE EVENTS.

Whilst on the subject of money, the Committee has been looking into the club funds in order to ensure that the club will be viable for the future. Although we had some sponsorship for the Lymington show to help offset our costs (total donations must go to the



The Scale Captain Attempts to conceal his surprise at winning the Solent Cup!

charities) we have been informed that the Masonic hall hire will be increased next year. In addition our advertising has increased and we must also consider the possibilities of increases in Insurance costs and lake hire fees, funding for our other exhibitions, general running costs etc. We therefore find ourselves in the position that club funds will very likely be at a very low level by 2013. We therefore wish to increase the annual subscription by £5 for next year (i.e. £15 per single membership and £5 on other memberships). By doing so we will ensure the club has sufficient funds for the future, and the need for another increase in the near future will not be required. It should be noted that the subscriptions have not been increased for a good number of years and it will still make our membership very reasonable compared with other clubs in the area (Poole MBC £25, Eastleigh £30+). We have an excellent club and a fantastic sailing facility that is the envy of many clubs with their weed blocked lakes, and although the water level is low at present we can still sail without problems.

We also realise that the cost of participating in exhibitions by members is increased by having to pay parking fees at Lymington Lifeboat Day and at Highcliffe, and we are looking at possible ways to help with this. For example, we have been reliably informed that we can apply for special rates from New Forest DC for the Lymington Lifeboat day as it is in aid of charity, and we endeavour to hold the Highcliffe show before the parking charges are put on by the council in April.

The final function of the year will be the Christmas Lunch at the South Lawns Hotel on Saturday 17th December and I look forward to seeing you there! Peter Taylor has once again produced a great Club Calendar, well worth a look, it makes a great Christmas Present. You can find more details for both the Lunch and the Calendar later in this newsletter.

With luck the lake will fill up again over the winter but I am sure some of you will still be sailing over the winter months!

See you at the lake... David

## Editorial: Now over to you!

Despite the heart rending appeal from my pet seagull at the end of the last newsletter, the number of contributions to this issue from members was exactly zero! So once again I have devoted part of this issue to a "scientific" contribution, this time on the depth of Setley Pond. For the future, please send me some contributions... otherwise the next newsletter might only have a lecture on quantum mechanics and general relativity (and I'm not an expert on either); you have been warned!

Once again it is time to obtain your copy of the "Setley Pond" calendar (see advert later in the newsletter). If you want a copy, please act now! Numbers are strictly limited and many have already been reserved by members whom I've seen at the pond.

And, since "calendars" means a New Year is on its way, my best wishes for the Festive Season to everyone!

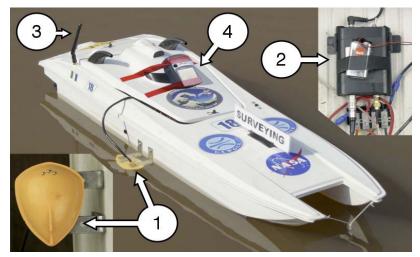
## Peter Taylor, Your Editor.



Your editor still hasn't got the hang of this model boating lark – they always sink when he sits on them!

## Feature Article: How deep is the pond?

**The Survey:** Since first joining the Club, I've often looked at the "Danger Deep Water" sign and wondered just how deep Setley Pond is. I therefore decided to conduct my own bathymetric (depth) survey of the pond. I used an NQD "Admiral" RTR catamaran speedboat converted to 2.4Ghz as a survey vessel (see photograph). Not an obvious choice, but it is stable, has plenty of spare buoyancy and lots of easily accessed internal space. I equipped it with the sort of echo-sounder they sell to anglers for use on radio-controlled bait boats and taped my hand-held GPS unit (like they sell to hikers) to the top of the hatch. By combining signals from US (GPS) and European (EGNOS) satellite based navigation systems, the GPS unit records its position on a memory card every 5 seconds to an absolute accuracy of 2m and even better relative accuracy.



The Survey Vessel:

"Viper FF1" Echo sounder:

- (1) Sound emitting and receiving unit (inset: view from below);
- (2) Electronics (powered by the PP3 size 9v battery taped to it);
- (3) Transmitter aerial to send depth information to shore unit.

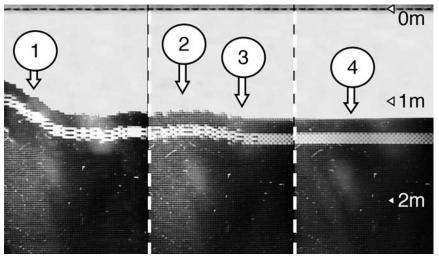
"Garmin ETREX" GPS Unit:

(4) The "handheld" GPS unit is internally recording.

The echo sounder radios the depth information to a handheld display unit ashore but there is no way to automatically record the results so I filmed the display using a video camera. I did the survey in April 2011 when the pond would be expected to be near its deepest after the winter.

**Results:** The image below shows the echo-sounder display unit and a sequence made up of three sample displays. Away from the pond sides (1) the pond bottom proved remarkably flat, in some areas consisting of gravel (2), but for the most part very flat muddy silt (4). The pond was also shallower than I expected being (in April 2011) mostly about 1.3m. Because of the lack of features I did not construct a detailed plot of depth contours but created the diagrammatic sketch (below right). As guide for estimating depths when at the pond, the highest point on the island was just breaking the surface when the depths shown here were measured.

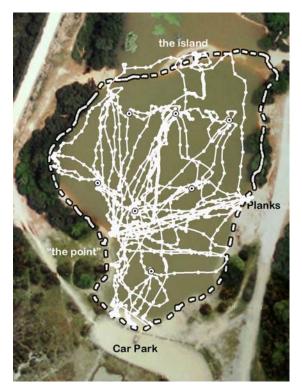




(above) pond bottom sequence constructed from three display screens. The bottom of the pond is the top echo line. The display indicates:

- (1) Slope down from pond bank; (2) gravel bottom;
- (3) transition from gravel to silt; (4) flat silt covering most of the pond.

(left) the hand held echo sounder display. The depth range shown is 0 to 3m but other intervals can be chosen; the sounder has a working range of 1m to 30m and I've checked its accuracy in the River Itchen.



The survey tracks (white lines) and the pond edge in April 2011 (black & white dashes). Buoy positions at the time of survey are marked by the bullet points. The (summer) background image is from Google Maps.

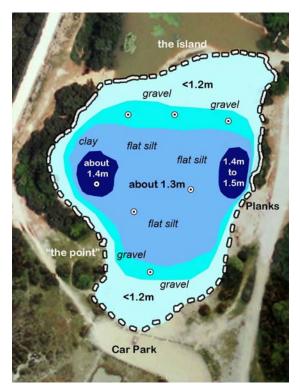


Diagram showing the approximate variation in the depth to the top of the mud or gravel as measured in April 2011. The indication of the bottom type is based both on the echo-sounder trace and my wading in the pond.

**Warning!** Although the survey shows the pond bottom as being mainly flat, remember that the echo sounder only sees the top of the mud. There could be deep silt filled holes which are not detected but into which a person could sink if wading in the pond. Always be very cautious if entering the pond in waders to retrieve your sunken model boat! A sensible precaution would be to use a buoyancy aid.

**Changes during the Summer:** I must admit I was surprised at just how shallow and flat bottomed the pond appeared to be and didn't know whether to trust the echo sounder. For depths of around 1m and less the electronics don't have time to switch from sending the sound pulse to receiving the echo,

so the measurements might be unreliable. To check the results I waited until this month (October 2011), when the pond is hopefully at its shallowest, and waded across the pond (see photo in Editorial and right). A light-hearted **video of the event** can be seen on the Club web site.

In April the water level had been about 5cm below the top of the planks at the western side of the pond. Using a laser level I found that the water height has gone down over the summer by about 65cm. When I waded in the



pond the video shows the water typically reaching around the waist of my dry-suit which would correspond to about 1m depth. But I was sinking into the mud to around the tops of my wellies – about 30 to 35cm. Thus the water depth above the mud was only about 65 to 70cm. Adding the 65cm change in water depth results in agreement with the April survey – about 1.3m. The photo shows me in the deepest part just south of the planks, where I was up to my armpits. Allowing for my sinking into the silt, that corresponds to depth in April of about 1.6m, again similar to that indicated by the echo sounder.

In most winters the western bank planks are under water. A check with the laser level showed that if the water were just reaching the wooden car park rails the pond depth would be about 50cm more than measured in April, 2011. That means most of the pond would be about 1.8m deep, with the deepest part more than 2m deep. Again I must emphasise that those values are from the water surface to the top of the mud; anyone silly enough to try to walk across would sink even deeper beneath the surface.

Finally, would we expect a 65cm drop in water level over the summer? Using the climatic means for the summer months at Boscombe Down (wind=4.3m/s, temperature=13.1°C, humidity=60%) a very rough calculation predicts a drop of around 50cm due to evaporation. But between mid April and mid October this year I measured 35cm of rainfall in Southampton which would offset much of that loss. That suggests that as one might expect, but contrary to my assumptions in the last newsletter, seepage through the ground is a significant factor during the summer. During winter the water table rises and the seepage will reverse; the evaporation decreases (as I discussed last time), there's more rain, and the pond level rises. At least we hope it will!

**Some Numbers:** From my survey, the area of the part of the pond north of the island is roughly 5800 sq. metres which mean that the loss of water during the 2011 summer was about 3800 metric tonnes (equivalent to  $476^{1}/_{2}$  African elephants, see right). The heat needed for the water lost by evaporation (again based on my estimate) would be 1940 x 1000 units of electricity, equivalent to an 80W electric light bulb on continuously over each square metre of the pond. This compares to the heat from the sun which on a summers day is about 1000W per square metre of the pond. Imagine 5800 one bar electric fires spread over the pond! Even for a small pond like Setley, the energy exchanges can be impressive.



**Conclusion:** Setley Pond is about 1 to 2m deep with a fairly flat bottom consisting of roughly another 30cm or more of soft mud except for some areas which are gravel mixed with clay. I've been told that, years ago when the pond was first used for yacht racing, a JCB was used to clear the bottom of the pond – which is consistent with the present day depth profile.

Peter Taylor

## **Charity events**







(above) "Thank you" letter for the Club donation to the RNLI from the Masonic Hall Exhibition and for our display in the boathouse during the Lymington Lifeboat Day and "Bath Race" (photo left).





Photos from the Club Exhibition in the Masonic Hall, Lymington on 3rd September and (right) extracts from the "Thank you" letter from Help for Heroes. The full text is available on the club web site (with more photos!).





## **Steering Competition for the Solent Cup**

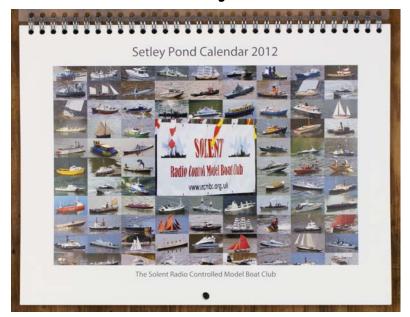
The 2011 Steering Competition was held on 13th August. The Scale Captain triumphed with a clear round, well done David!



Official Results:

	Name	Faults	Time
1.	David McNair- Taylor	Clear	4m 22s
2.	Andy Griggs	1	2m 56s
3.	Andy Davis	2	3m 27s
4.	Bob Eaton	3	5m 40s
5.	Jake Griggs	4	3m 38s
6.	John Frost	4	6m 45s
7.	Luke Griggs	5	2m 33s
8.	Paul Nixon	5	7m 06s
9.	Steve French	7	3m 14s
10.	Peter Oram	7	5m 15s
11.	Harrison Evans	7	5m 59s

### Available Now - the Setley Pond Calendar 2012



As those of you who have bought calendars in past years will know, this is a high quality wall calendar professionally printed on light card and wire bound with stiff translucent plastic covers, front and back. Inside there are twelve photos from 2011 of model boats on Setley Pond and there's a host of models on the title page... is yours there? Opens to A3 size with plenty of space to write appointments etc. Similar quality calendars in the shops cost around twice as much.

You can view a copy on most Club days at the Pond, but place your order as soon as possible. We only have a limited number available and "when they're gone they're gone"!

Opens to A3 size
Wire Bound
Light card pages and strong covers front and back
12 photos of boats on Setley Pond
Price £10



## Members Adverts:



1/128 scale model of German battleship **KM BISMARCK** as shown in the photos. Length: 6ft 6ins. Radio Control, 3 Motors, 2 Electronic Speed Controllers, and smoke unit. All over grey colour scheme, wooden hull, and first class fittings.



Price: Offers in the region of £1000; Contact: Archie Howie (phone: 01425 673657)





**Thames Sailing Barge** in racing trim. Length: 41ins (104 cm). Two alternative detachable keels of different weight for different wind conditions. Complete with Hitec 40MHz controller, Hitec receiver, and batteries.

**Price: £400;** 

Contact: Arthur Shannon (phone: 023 80293108)

"Members Adverts" is a free service offered for private (i.e. non-commercial) model boat related sales. Advertisers are strongly encouraged to exploit other possible sales routes such as **ebay** and the Boat Yard:Marketplace/Sales/ category on **ModelBoatMayhem forum** (if you are a "Full Mayhemer").

**Buyers:** While the adverts are displayed in good faith, the SRCMBC accepts no responsibility for the accuracy of descriptions on this page; check before you buy!

#### **Club Contact details**

#### For Christmas Lunch (see end of news letter)

(also if your address, email, or other membership details change):

Contact: Lorna Soffe, 1 Stoneleigh Avenue, Hordle, Lymington, Hampshire, SO41 0GS.

Email: membership@srcmbc.co.uk . Phone: 01425 615305

#### **For Calendar Orders**

(also contributions to the newsletter and web site):

Contact: Peter Taylor, 84 Priory Road, St Denys, Southampton, SO17 2HS.

Email: info@srcmbc.org.uk . Phone: 023 80554670 (you will get my answering machine; say who you are and I'll either answer if I'm there, or get back to you!)

#### Cut off date for entry in the next issue is: 31st December 2011

But don't wait till then, send it to me now, and especially give me more time if you are submitting on paper or want me to do the "art" work!

#### For Other Club queries etc.

For any other queries contact:

The Scale Section Captain: David McNair-Taylor,

Email: scalecaptain@srcmbc.org.uk . Phone: 07887967887





#### **Club Web Site:**

#### www.srcmbc.org.uk

(NB a full colour version of this newsletter and all the movies on YouTube can be viewed through the Club Web Site)

Club YouTube Channel: www.youtube.com/user/srcmbc

#### **Club Christmas Lunch**

Or phone Lorna at: 01425 615305

South Lawn Hotel and Restaurant

Pre-Christmas Lunch Menu £18.50 per person



Home Made Winter Vegetable Broth
sprinkled with Croutons
Salmon Terrine
With Citrus infused Leaves and Coriander Dressing
Chicken Liver Parfait
with Red Onion Marmalade and Melba Toast



Traditional Roast Fresh Turkey
with Sage and Onion Seasoning, Bacon wrapped Chipolata and rich roast gravy
Saute de Boeuf Bourguignonne

Home Made Fishermans Pie topped with Potato Mash

Wild Mushroom and Chestnut Risotto with Parmesan crisp

Served with a Selection of Vegetables



Steamed Christmas Pudding with Brandy and Orange Sauce

Duo of Chocolate Terrine with Raspberry Coulis

Mocha Tart with Crème Anglaise



Fresh Filter Coffee with Mince Pies Christmas Crackers

Please book your place at the club Christmas Lunch as soon as possible (cut off: 13th November)!
<b>⊱</b> Reply slip
I/we wish to attend the Christmas Lunch on 17th December 2011, please add my name to the list:
Name (print):
Please return to: Lorna Soffe, 1 Stoneleigh Avenue, Hordle, Lymington, Hampshire, SO41 0GS