

April 2013

# Plan for LCRK proposed boat storage facility

### by Jeremy Spear

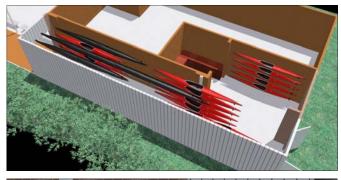
LCRK is currently exploring opportunities whereby we can obtain a storage "shed" for boats.



A small team of members including Tom Simmat, Wade Rowston and myself has

prepared a Development Application submission and is now submitting this. As the piece of land we intend using is actually Crown Land, this process may be a bit long-winded.

The intent is to have an approx 50 square metre "lean-to" facility on the western side of the main building at our pontoon site. It will be intentionally long and thin and is intended to





An artist's impressions, not to scale, of the proposed storage facility. Top: An aerial perspective, with the river in the foreground and the BBQ area out of picture to the left. Bottom: The view from the BBQ area.

house K4s slung from the roof as well as double and single kayaks.

Our proposal envisages us vacating the storage shed we are currently using and in effect swapping it for a larger boat shed plus a similar sized equipment storage space almost opposite, located on the river side of the big athletics storage shed, which would be incorporated and extended into one decent sized storage facility.

There is intended to be a fleet of club-owned boats – available to newbies, first-timers and those who need a boat. This will increase the eclectic fleet of club boats, which

currently includes the two very popular TK1s stored on site. Ideally there will be some smaller boats suitable for introducing children to the sport, depending on demand.

It is proposed that secure on-site boat storage racks will be able to be offered to members for those who would like to store a boat there, in return for a storage fee. Some people find it hard to store boats at their homes. (Some members just have too many boats!) This could also open up paddling and fitness opportunities for people who live in units and apartments where they can't store a boat.

The maximum capacity will depend on the exact space available in the final approval but there will probably be storage for about 30+ boats.

Subject to the granting of Development Approval, LCRK will apply for Community and Maritime grants to offset costs of building the facility, with the assistance of Willoughby City Council which has been generous with its help and guidance.

When build time comes we will need many members to pitch in and assist in order to keep costs in check. This process is laborious and long-winded but progress is being made and in the right direction.

The success of our application is also partly dependent on cooperation from other park users, including the Little Athletics and UTS sporting groups. Please remain courteous and polite to all other users – especially regarding parking and not blocking access/egress to the gym and toilet facilities adjacent to our sign-on desk.



Organised by Jon Harris and supervised by Roger Deane, a team of 8 LCRKers participated in Clean Up Australia Day based from the pontoon. Robert Grozier, Tom Holloway, John Duffy, Jeffrey Tonazzi, Wade Rowston and George von Martini collected a surprising amount of rubbish within 300m each way from the pontoon. The rubbish was found in the mangroves at the high water mark and only accessible by kayak. Well done everyone! (More on page 8.)

## 'Ain't nothing like Middle Head in a big swell!'











Right: Tom Simmat, in his "bottle boat" is welcomed at the finish by Tony Carr, Paul van Koesveld, Christine Simmat, Phil Geddes, Kobi Simmat, Jeremy Spear, Andrew Mathers and Meg Thornton

The annual Bridge to Beach bash, from the Harbour Bridge to Manly ferry wharf, was postponed for a week because of bad weather and when it was finally held on March 10 conditions were still rough enough to give competitors a rollicking ride down the harbour.

A strong south-easter combined with a 2 to 3 metre swell to test the best. A swirling rebound from Bradleys Head, bigger than usual, had scores of paddlers in the water, with rescue boats working overtime. The water was absolutely littered with capsized boats. Of the 291 starters, 33 didn't make it to the end – a DNF attrition rate of over 10%.

LCRK paddler Meg Thornton summed it all up by saying: "It was an absolutely exhilarating event. You put yourself out there in quite testing conditions with this great safety net of hundreds of like-minded, albeit slightly bent and twisted paddlers, knowing they will always lend a hand if needed.

"But ultimately its up to you. You're pulling together all your skill base to deal with the conditions and it's such a damn hoot to get through it on top! Talk about adrenalin rush – ain't nothing like Middle Head in a big swell!"

LCRK was well represented, as usual. Tom Simmat attempted to steal the limelight by paddling a homemade craft fashioned from 1000 plastic drink bottles fished out of the harbour. It was an anti-pollution propaganda paddle that made headlines in 55 newspapers, including major papers in Sydney, Melbourne, Brisbane and Perth (see page 3).

Fat Paddler Sean Smith gave a lively description of the race in a report on his website which said: "Turning into the run to Middle Head, everything got crazy. Huge swell was curling around South Head and hitting us from 45 degrees. It was also hitting the rocks behind us, rebounding back out and churning the water up in every direction. Because it was also low tide, the swell height was amplified with big white-capped waves seemingly hitting us from all sides...

"A few hundred metres from Middle Head I was approached by a NSW Police boat, its rear deck filled with rescued paddlers, who asked if I wanted to be pulled

### LCRK in Bridge to Beach

| Competitor     | Categ     | Time    | PICC | at plc |  |
|----------------|-----------|---------|------|--------|--|
| Matt Blundell/ | -         |         |      |        |  |
| Mike Snell     | Dbl ski   | 47.54   | 5    | 2      |  |
| Toby Hogbin/   |           |         |      |        |  |
| Andrew Wheeler | Dbl ski   | 49.05   | 9    | 3      |  |
| Matt Shields   | OM        | 1.03.17 | 64   | 12     |  |
| Jeremy Spear   | Seakyk    | 1.14.34 | 104  | 2      |  |
| Rod Stubley    | 50+       | 1.16.31 | 112  | 17     |  |
| Andrew Mathers | 0C1       | 1.28.20 | 150  | 1      |  |
| Meg Thornton   | W40+      | 1.41.31 | 189  | 8      |  |
| Caron Jander   | W40+ 2    | 2.03.00 | 230  | 10     |  |
| Tom Simmat     | Plastic 2 | 2.05.27 | 234  | 19     |  |
| Andrew Benoit  | Seakyk    | DNF     |      |        |  |
|                |           |         |      |        |  |

out. I was polite when I declined, but the captain of the boat wasn't at all happy with the prospect of facing another possible rescue. They mentioned they'd fished dozens of paddlers out from just past Middle Head, that the ocean was seething and I should think very carefully before going on. I was firm that I wanted to go on."

You can read Sean's full exciting a c c o u n t a t h t t p : / / fatpaddler.com/2013/03/race-reportmanly-wharf-bridge-to-beach-2013/.

(Thanks to Tony Carr for taking and arranging pictures of the race.)



# My problem with the bottle by Tom Simmat

The Sea Life Conservation Fund is a division of Manly Sea Life Sanctuary and Sydney Sea Life Sanctuary. Today they have two major projects. One is the removal of unnecessary weirs at the salt water/fresh water tidal interface. The one we are familiar with on Lane Cove River is a good example. That tidal interface area is an important breeding ground for many species of fish and other creatures, many nearing extinction.

The other project is to increase awareness of the problem of discarded plastic bottles in our waterways and to pressure the Federal Government into completing and passing legislation to introduce a national deposit scheme, similar to that in South Australia.

Over a period of only one month they had collected out of Sydney's North Harbour alone more than one thousand plastic bottles.

A few months ago I was approached by Claudette Rechtorik, their environment director, to build a couple of boats made out of the plastic bottles that had been collected. The idea was that the staff at Manly were going to compete with the Sydney staff in the Bridge to Beach Ocean Series Race. This race sort of connected the two aquariums. Each boat was to have up to six paddlers.

The concept was to bring public attention to the problem of

discarded plastic bottles and use the public to put additional pressure on the Federal Government.

We searched the net for a design. There were boats out there made from plastic bottles, or at least partly constructed using plastic bottles. Fundamentally all these boats, however, used identical bottles.

We were going to use bottles that were out of the harbour so we anticipated a large variety.

I asked them to bring me all the bottles they had collected so far and so I could experiment with a design and start with a one-man prototype.

As expected, when the bottles arrived there was a vast variety and the first thing to do was to sort them into brand size types. We discovered that more than half were water bottles and that there was some consistency within drink manufacturers. Coca Cola and sub brands Fanta, Sprite etc all had similar base diameters, as did Schweppes and the sports drinks Gatorade etc.

Unfortunately the water bottles, mainly Neverfail Spring Water by Coca Cola, which we had the most of, were very flimsy with little inherent strength.

We tossed around the philosophy of what we were trying to do. I had made many pieces of furniture out of recycled timber, but generally the wood was not recognisable as such. We could have put the plastic bottles through a shredder and remoulded them into a boat, or pressed the bottles between two layers of fibreglass and resin.

In the end the philosophy was that the boats had to be made, as far as possible, out of recycled materials, the primary material was to be the bottles and the bottles must be recognisable as discarded plastic bottles. The "aesthetic" if you like was to be at "billy cart" level, not over-worked. Just as well because we were running out of time.

My son Daen came up with the idea that by cutting the top and bottom off a bottle this could be a joiner piece between two similar bottles. This worked well, so we put together long sausages of bottles. However these lacked any strength, especially the flimsy water bottles. Gluing them together helped a little but still not strong enough, after all this boat was to go all the way down Sydney Harbour including past the Heads.



I needed some ideas so I went off to Kimbriki tip which has a recycling section to see what was there. It all felt a bit like Junk Yard Wars if you have ever watched that TV show.

I found a couple of pieces of clear polycarbonate flashing and thought they would make a good sub frame if joined together.

The staff at the aquariums dive the Sydney Harbour floor and out around the Heads to monitor aquatic life. The sea bottom is littered with fishing reels and line which entangles fish and diving birds. They gave me a bagfull.

Just with bottles the boat was not stiff enough so I ripped down some treated pine rafters I had recovered from a pergola demolition and added some stringers. I made some bulkheads out of old used plywood. Daen tied the bottles to this sub structure and although the boat was still very flexible I thought acceptable. I made a seat, a rudder and pedals out of ply scrap

with plastic bottle sides as hinges.

After a sea trial late one afternoon at Clontarf, I did a bit of sealing with silicon between the bottles to keep some of the water out.

The boat took about 1000 bottles. Clearly it would have taken a lot more time and bottles to develop and build a boat to take two paddlers and we had run out of time and bottles. So we decided to run with just this one

boat.

Another sea trial was held with the media outside Manly Sea Life Sanctuary in much rougher water, and the boat seem to hold together OK.

I took off from Blues Point into a stiff easterly about half an hour before the rest of the Bridge to Beach competitors. The wind waves were about half a metre and the boat was flexing badly. Water was coming in over the bow.

I had a bailer (made out of a bottle) and bailed once off Milsons Point and again in the middle of Athol Bay. Approaching Bradleys' Head the boat flexed as it went over a particularly big wave and filled with water. I attempted to bail but got nowhere. It was not going to sink – after all it was made of sealed bottles – so I pushed on. The boat flexed more and more, but was very stable.

On the way I helped a few capsized ski paddlers back on to their skis.

The exercise was being filmed from one of the ocean aquarium boats. At Middle Head it was very rough, I was paddling most of the time with the water around my chest. I had some fears the boat would break in half and there would be bottles scattered back into the harbour.

I called the aquarium boat over, got out and we towed the bottle boat across the Heads. I got back in the boat in the relative calmer waters off Dobroyd Point and paddled to the finish.

The exercise was worthwhile and got the public attention we were after. The boat is on display at the Manly Sea Life Sanctuary – but oh, to be back on a proper ski.



### RACING

## **Marathon series opens in Canberra**



The leaders in division 1: Matt Blundell, Tony Hystek/Simon Stenhouse, Brett Greenwood



Matt Blundell (in yellow) sprints through a portage with Simon Stenhouse and Tony Hystek



Toby Hogbin leads Stewart Innes through a portage



Placegetters Phil Geddes and Paul van Koesveld (left) and Tony Hystek with their certificates

### Myall Classic

That fine tune-up for the Hawkesbury, the Myall Classic, is back on the menu after being in doubt. Mike Eggleton is once again running the event despite having moved from the area. The Myall will be held on Saturday Sept 14 with options of 47km, 27km and 12km.

Lane Cove paddlers travelled to Canberra in force for the first race of the Marathon 10 2013 season and posted some good results. There was an excellent fleet of 117 boats with the course being kept almost totally in the creek due to strong winds out on the lake.

Nick Chai made an outstanding return to racing and in division 6 was the only competitor under 2 hours, but it was treated as a ranking race and this deprived him of an official win.

The old division 6 has now been split into two, with paddlers taking over 2h 10m being put into a new division 7. This left the usually heavily populated division 6 with only 12 paddlers, which may be some sort of a record. There were 7 in division 7, but 2 of these will be elevated to division 6 next race. The old divisions 7, 8 and 9 have gone up to 8, 9 and 10.

The 15km division 8 saw the old firm of Don Rowston and Bert Lloyd back in action, and a new pairing of Alanna Ewin and Danielle Seisun.

Tony Hystek combined with powerhouse Simon Stenhouse in division 1, and then with Toby Hogbin in a post-Marathon race the following day. Tony seems to have a new double partner every race – perhaps he's searching for that elusive perfect mate, or maybe he's gener-

Four hours after racing in the Marathon 10, Matt Swann suffered terrible stomach pain and was taken to hospital in Canberra. He was operated on early Monday morning for a side effect of a bowel operation he had three years ago. He will be out of action for a few months but is already planning for the Hawkesbury Classic. Everyone at LCRK wishes him a speedy and full recovery.

ously sharing his talents with all and sundry. (Or it could be he's being given the flick by his partners.) We should run a sweep on how many years it will take for him to exhaust all options.

Toby sent in this report on the division 1 race: "Tony and Simon set the pace from the start in the double. Matt Blundell and Brett Greenwood managed to catch the wash and broke away from Stewart Innes and me. Matt would get a better portage than Brett and Tony and Simon and make a bit of ground on them. Tony and Simon would slowly catch up again, with Brett doing a great effort to hold on. The last portage Tony and Simon made a mistake and Matt was able to put a good gap on them, and it took them about three km to catch back up. Tony and Simon put on another burst and dropped Brett but Matt got the better of them to take the win. Stewart and I were left to battle it out for fourth and fifth. I managed to get fourth in a very close finish."

| M10 Race 1 Can      | be  | rra Mar   | 16   |
|---------------------|-----|-----------|------|
| Competitor          | Div | Time      | Plc  |
| Matt Blundell       | 1   | 1.32.25   | 1    |
| Tony Hystek/        |     |           |      |
| Simon Stenhouse     | 1   | 1.32.28   | 2    |
| Toby Hogbin         | 1   | 1.38.14   | 4    |
| Bob Turner/         |     |           |      |
| Kristy Benjamin     | 2   | 1.44.50   | 5    |
| Tom Simmat          | 3   | 1.49.49   | 8    |
| Phil Geddes/        |     |           |      |
| Paul van Koesveld   | 4   | 1.49.32   | 3    |
| Tom Holloway        | 4   | 1.50.55   | 5    |
| Wade Rowston        | 4   | 1.55.29   | 7    |
| Jeremy Spear        | 5   | 1.54.30   | 5    |
| Duncan Johnstone    | 5   | 1.59.21   | 10   |
| Derek Simmonds      | 6   | 2.04.01   | 4    |
| Matt Swann          | 6   | 2.07.58   | 7    |
| Richard Lindsay     | 6   | 2.09.37   | 9    |
| Nick Chai           | 6   | 1.59.50   | Rnk  |
| Anjie Lees          | 7   | 2.11.26   | 3    |
| Bert Lloyd/         |     |           |      |
| Don Rowston         | 8   | 1.31.58   | 7    |
| Ann Lloyd-Green     | 8   | 1.35.36   | 9    |
| Alanna Ewin/        |     |           |      |
| Danielle Seisun     | 8   | 1.34.31   | Rnk  |
| Tracey Hansford     | 10  | 1.07.43   | 8    |
| Divs1-7=20k, div8=1 | 5k, | divs9-10= | =10k |

### Wagga change

The Marathon 10 series race scheduled for April 20 in Wagga Wagga has been moved forward a week due to a clash with a big touch football competition which has booked out accommodation. It will now be held on April 13.

BELOW: From Toby Hogbin: Pic showing Tony Hystek and I chasing Matt Blundell and Stewart Innes in the 30km race in Canberra on March 17, the day after the Marathon 10 event. They shortened the race to six laps of the river instead of out on to the lake due to strong winds. Distance ended up being just over 27km. Matt and Stewart in an Epic Legacy K2 and Tony and I in an Epic V10 double. It was a close race with Matt and Stu putting a bit a pressure on during the race but we managed to stick with them. Came down to a sprint at the finish with Matt and Stu taking it out a couple of seconds. It was good to paddle with the big man and had a good time.



## White water on the Snowy and Murray

### by Ruby Gamble

John Thearle, I and two other members of SPAN Outdoors spent the Australia Day weekend whitewater kayaking on the Snowy and Murray Rivers.

On the first day we put in at Jacob's Creek and took two days at an easy pace to paddle to Scotchie's Yard, just north of the Victorian Border.

I was an absolute beginner at whitewater and also at paddling a kayak with no rudder. I learned how to do a wet exit on the first day, and attempted and failed at doing an eskimo roll.

John, having played a lot of canoe polo, was fine with eskimo rolls and took the rapids with ease. The other two people were in an open Canadian and treated the rapids with caution, often opting to

port around or walk their boat through. The Snowy River was about as low

as you'd want it to be, with a bit of weight-shifting required to get boats over some of the shallower sections. Generally, though, it was deep enough to get us through.

Rapids were up to a hard grade three and tended to be short and interspersed with long quiet pools. The most challenging section was a narrow gorge that included a couple of small drops, which was bypassed due to looking a bit dicey.

We decided to pull out at Scotchie's Yard instead of continuing to the border because after this point the river became more open, with very few rapids. I wasn't the best at steering my short boat and found the long flatwater sections very slow, so we decided to head for greener pastures, and on the second afternoon drove to Tom Groggin on the Murray River.

We paddled about 5km of

whitewater along the Murray, where the heavily treed banks contrasted significantly with the open boulder-strewn banks and narrow gorges of the Snowy.

The Murray was where I came unstuck, with the only forced wet exit for anyone on the whole weekend. I got a few bruises but came up okay!

|   |   |   |   |   | - |   |    |   |   |
|---|---|---|---|---|---|---|----|---|---|
| 2 | h | 0 |   | r | S | 0 | rı |   | C |
| α |   |   | u |   |   | 5 |    | G |   |

| Competitor Ca          | tegory  | Time Plc | Cat | plc |  |  |  |
|------------------------|---------|----------|-----|-----|--|--|--|
| Botany Challenge Feb 9 |         |          |     |     |  |  |  |
| Long course            |         |          |     |     |  |  |  |
| Tony Hystek/           |         |          |     |     |  |  |  |
| Richard Robinson       | Dbl ski | 1.09.39  | 4   | 2   |  |  |  |
| Kristy Benjamin/       |         |          |     |     |  |  |  |
| Bob Turner             | Dbl ski | 1.22.26  | 31  | 5   |  |  |  |
| Tim Hookins            | 60+     | 1.34.12  | 55  | _   |  |  |  |
| Phil Geddes            |         | 1.34.50  |     |     |  |  |  |
| Andrew Mathers         | 0C1     | 1.40.09  | 67  | 3   |  |  |  |
| Andrew Benoit          | 40+     | 1.42.08  | 69  | 24  |  |  |  |
| Lake Macquarie March 3 |         |          |     |     |  |  |  |
| Long course            |         |          |     |     |  |  |  |
| Tony Hystek/           |         |          |     |     |  |  |  |
| Tim Hookins            | Dbl ski | 1.42.36  | 3   | 1   |  |  |  |
| Short course           |         |          |     |     |  |  |  |
| Len Hedges             | 50+     | 1.05.07  | 9   | 3   |  |  |  |
| Tracey Hansford        | WSeak   | yk DNF   |     |     |  |  |  |

### **Ocean Series**

| Competitor          | Category | ry Time Plc Cat p |    |   |
|---------------------|----------|-------------------|----|---|
| <b>Cronulla Bay</b> | Runner   | March 2           | 23 |   |
| Long course         |          |                   |    |   |
| Tim Hookins         | 60+      | 1.43.28           | 52 | 4 |

to paddle further on the Murray, but had to continue on up into the hills to do some maintenance on Derschkos Hut (near Mt Jagungal). enjoyed We both rivers. with both having excellent camping spots, and would love to try them again with a slightly higher water level.



Tim Binns is celebrating the birth of his second son, Thomas, on March 18.



### LETTER TO THE EDITOR

### Lion-hearted member

I immensely enjoyed reading your most recent issue, particularly the article by Mr Duffy "Bass Strait: 'This is what living is about'".

I am writing to express my humble disagreement with the phrase "Our team of 4..."

No member of the team coped better in the conditions than our beloved FIFTH member, Lion (as pictured). He embodied the happy-go-lucky nature of adventure. There were

no complaints of soreness or injury, no difficulties at meal time with unreasonable requests such as no tinned fish, and no requests for unscheduled bathroom breaks. Content with any progress, no matter in



which direction, you could not find an image in which Lion is not smiling. The same could not be said for some of the other members at various times...

Thus, I call for the recognition of this journey as one of a "team of 5" (though I will settle for 4.5). No doubt the inclusion of his participation will inspire us and other lions to even greater feats.

I have included a photo indicating that Lion was trialling being in the front seat of the double.

- Andrew Pratley & Lion

Letters to the Editor are invited from members. Not exceeding 150 words and emailed to sapackman@gmail.com. Free spelling checks are offered to those not at ease with written English.

### **Podium finish at World Champs**

LCRK member Michael O'Keeffe finished third in the 60-64 age group at the

sprint distance triathlon world championships held in October. He went to the World's as A u s t r a l i a n champion with less than 12 months triathlon experience under his belt. Michael was

beaten by two Americans and is not sure whether 3<sup>rd</sup> in the World's has a better ring than Commonwealth champion!

The race started well in the very cold Auckland harbour and at the end of the 750 metre swim leg had opened a 30 second lead. Then came the gruelling 20km bike leg with a few decent hills – the eventual

winner took the lead midway through this leg. Michael was still in second and then came his weakest leg, the 5km run. He held off most of the hares to claim third.

The finish was tight with just 25 seconds separating 3<sup>rd</sup> and 6<sup>th</sup>

He is now back in the kayak having shifted to North Narrabeen in January and is getting ready for the Akuna Bay Multisport race in August. He is looking forward to seeing many Lane Covers there again.



afternoon drove to Tom Groggin on the Tackling the white water on the Snowy (top) Murray River and on the Murray

# The Effect of Weight on Kayak Speed

### by Tom Holloway

Extra weight can make your kayak more stable, however if stability's not a problem then it just tends to slow you down. How much slower will you be if you put on excess body weight? How much faster is a lighter boat? Is the difference worth worrying about?



To help answer these questions let's first consider what various rowing and paddling academics have concluded:

"the percentage loss of speed is one sixth (0.167%) the percentage increase in mass" (Dudhia [1])

"hull speed goes as the −2/9-th power of weight" [i.e. 0.222% loss of speed per 1% increase in weight] (Burke [2])

"The percentage decrease in mean speed is equal to one quarter (0.25%) of the percentage increase in total weight" (Lazauskas [3])

So there's a range of slightly different theoretical opinions, however they're all saying much the same thing – that kayaks and rowing boats will be about 0.2% slower for every 1% increase in total weight, assuming power output is unchanged.

That's not the end of the story, though. Those values are theoretical, they're not based on real-world data, and a number of experienced paddlers (e.g. www.surfskiracing.org [5]) give significantly different answers. They claim on the basis of personal experience that a 1% increase in total weight can slow you down by 0.4%-1.0%, which is up to five times what the theory predicts! Muddying the water further are the small minority of paddlers (e.g. www.roguepaddler.com [6]) who claim that extra weight doesn't slow you down at all.

What should we believe? The theoretical numbers? The opposing claims of real paddlers? Let's take a look at some hard numbers and see if we can find out.

#### **Olympic Rowing Results**

Coxed pairs and coxless pairs provide a good case study of the effect of weight on boat speed. These boats have the same hull and "engine"; however coxed doubles are carrying a lot more weight – a 55kg cox, plus a 5kg heavier boat (32kg vs 27kg). Assuming 2x 90kg rowers and 2x 2.5kg oars, a coxed pair is 28% heavier than a coxless pair (272kg vs. 212kg).

Now the average gold medal time for a coxless pair from 1972 to 1992 was 6:49, and the average time for a coxed pair during the same era was 7:12, a speed decrease of 5.6%. So on average every 1% increase in weight is slowing the coxed boats by approximately  $5.6\%/28\% \sim 0.2\%$ , or more correctly log<sub>1.056</sub>1.28 = 0.22\%, which falls right in the middle of the theoretical estimates. So far, so good – the theory seems to work – for rowing boats at least! However it was paddlers not rowers who were disputing the theory, so what about kayaks?

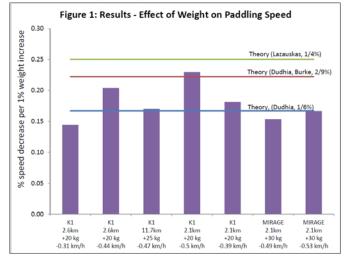
### Kayak Time Trials

There's no readily available data for kayaks, so to test the effect of weight on kayak speed I paddled a number of time trials in a K1 and a Mirage 530. The time trials were out-and-back circuits at Narrabeen Lakes and at Wirong, and ranged in length from 2.1km to 2.6km. I completed each circuit five times in succession, alternating between no extra weight and 20+kg of extra weight, so as to isolate the effect of weight on boat speed. You need a lot of weight to measure the difference. All trials were done at high tide in relatively calm conditions, and my heart rate remained at a constant 80% throughout. I also paddled our 12km time trial at high tide carrying 25kg to verify the effect over a longer distance.

Figure 1 shows the results compared to the theoretical predictions. Each vertical bar represents one time trial.

The results were consistent and in the same ballpark as the theoretical answers, so it seems fair enough to conclude that the theory is generally correct for kayaks.

Judging from the graph the theoretical 1/6% value (the blue



line) gives the best overall prediction, especially for the full 11.7km "12km" distance. So that's our answer – a 1/6% reduction in speed for every 1% increase in weight, which is right back where we started!

### Effect on Times

Now that we have an answer, let's take a look at the effect of weight on our Wednesday night time trial.

Consider an average Lane Cove paddler weighing 90kg (including boat, paddle, etc.) who can complete the 12km time trial in 65 minutes. What difference will one extra kilogram make to their time, all else being equal?

New Time = Old Time x (NewWeight/OldWeight)<sup>1/6</sup> = 65:00 x (91kg/90kg)<sup>1/6</sup> = 65:07.2

They'll be about 7 seconds slower over 12km. Not a huge amount per se! However the effect is cumulative. Figure 2 shows the effect of 2.5kg, 5kg, 7.5kg, 10kg, and 12.5kg extra dead weight on our paddler's 12km finishing time.



Figure 2: Effect of extra dead weight on average paddler's 12km finishing time (65 minute 90kg paddler)

So to go one minute faster based on weight alone most of us would need to lose 8 or 9 kg. That's a fair amount, however one minute's improvement is a substantial amount too! Once you've plateaued it's very difficult to break your PB by seconds, let alone by a minute. Losing body fat is clearly a good way to improve your times, assuming you have excess body fat to lose. If you reduce lean body weight you'll be less powerful, which will slow you down. Remember, the theory assumes power is unchanged, and that you can paddle just as hard with or without the extra weight.

Note that faster paddlers and heavier paddlers will see slightly less effect from 1kg change in weight than average paddlers (vice versa for slower paddlers and lighter paddlers). Table 1 shows the effect of 5kg extra dead weight on various different paddlers. See for yourself how a 5kg change in dead weight would affect your times. Alternatively, use the aforementioned equation.

| Table | Table 1: Effect of 5kg extra weight on 6k/12k time trial (+min:sec) |       |                    |               |         |       |  |
|-------|---|-------|--------------------|---------------|---------|-------|--|
|       |   |       | <b>Current Wei</b> | ght (includin | g boat) |       |  |
|       |   | 60kg  | 75kg               | 90kg          | 105kg   | 120kg |  |
|       | 30:00   | +0:24 | +0:19              | +0:16         | +0:14   | +0:12 |  |
| g     | 40:00   | +0:32 | +0:26              | +0:22         | +0:19   | +0:16 |  |
| Time  | 50:00   | +0:40 | +0:32              | +0:27         | +0:23   | +0:20 |  |
| ent   | 60:00   | +0:48 | +0:39              | +0:33         | +0:28   | +0:25 |  |
| 5     | 70:00   | +0:56 | +0:45              | +0:38         | +0:33   | +0:29 |  |
| S     | 80:00   | +1:04 | +0:52              | +0:43         | +0:37   | +0:33 |  |

#### Hawkesbury Canoe Classic

How about the Hawkesbury Classic? Assume our paddler can finish in 10 hours. What difference will another kilogram make to their Hawkesbury finishing time?

New Time: =  $10:00:00 \times (91/90)^{1/6} = 10:01:06$ 

They'll be about one minute slower. This won't matter very much for the average paddler, but for those chasing records

every minute counts, as several Lane Cove paddlers have found out the hard way over recent years. So if you want to break a record, paddle light – not that potential record breakers really need to be told that! However make sure you carry enough to stay warm and hydrated. If you freeze or run dry you'll lose a lot more than a precious minute!

#### Conclusion

Flatwater paddlers will be approximately 1/6% slower for every 1% increase in total dead weight, all else being equal.

For a typical single kayak one extra kilogram of dead weight is roughly equivalent to:

- 7 seconds in the 12km Wednesday night time trial.
- 1 minute in the Hawkesbury Classic.

#### References

- [1] Physics of Rowing, Anu Dudhia, www.atm.ox.ac.uk/rowing/physics/
- [2] Science of Paddling Pt. 1, Shawn Burke, http://www.surfski.info
- [3] Effect of Weight on Boat Speed, Leo Lazauskas, ROWING SCIENCE NOTES: 7 July 2012
- [4] Olympics Database, www.databaseolympics.com
- [5] Does ski weight make a difference?, www.surfskiracing.org
- [6] The myth of weight, www.roguepaddler.com

Readers are invited to comment on the weight/speed issue, either on this article or on your own experiences. Email your comments, up to 150 words, to sapackman@gmail.com. They will be published in the next issue of *Kayak Kapers*.

## **Recreational program: Outer Sydney Harbour Explorer**

### by Adrian Clayton

On February 16 LCRK hosted a sea kayaking trip as part of the PaddleNSW recreational paddles program.

Under leaden skies, seven paddlers set out from Clontarf on Sydney's Middle Harbour on a 23km circuit which included a crossing from North Head to South Head. The group was made up of paddlers from four different PaddleNSWaffiliated clubs: LCRK (Tom Holloway, Andrew Kucyper and Adrian Clayton), Manly Warringah Kayak Club, Just Paddlers and Sutherland Shire Canoe Club.

On the first leg of the trip the group paddled into the main harbour via Grotto Point and along the rugged shoreline of the Sydney Harbour National Park to Reef Beach, just beyond Dobroyd Point. Accompanied by a light rain shower, we crossed the ferry lanes and entered pretty Spring Cove where we had our first shore break at Quarantine Beach.

An interesting feature along this route was the isolated shacks in Crater Cove, built nearly 100 years ago, and still used (no wonder – they have milliondollar views). The rock engravings, some dating from the 1880s, and the museum at the Quarantine Station entertained some of the group during the short shore break.

The next leg was the paddle out to North Head, passing beneath the precariously-positioned "Old Man's Hat". The rebound, colliding with the waves created by an SSE breeze gusting at 14 knots, made for a bumpy ride along the cliffs which raised the needle on the comfort meter for one or two in the group. The crossing, from North Head to South Head, a first for some of us, was completed in a gentle swell and without incident. A cruisy paddle up to Neilsen Park for a lunch break followed.

After lunch we headed a little deeper into the harbour before rounding Shark Island with views of the Harbour Bridge and Opera House before undertaking another ferry lane crossing. Just off Chowder Bay we faced the biggest challenge of the day – avoiding the racing Etchels out of the Royal Sydney Yacht Squadron as they each jockeyed for favourable starting positions.

On the homeward route we paddled

around Middle Head, experiencing a bit more rebound, across to Grotto Point and back to Clontarf which we reached around 2.30pm.

It was an enjoyable outing: the weather gods were kind to us and we experienced a varied range (but nothing hard-core) of genuine sea kayaking conditions.

I'm intending to offer put on rec paddles with a sea kayaking focus for PaddleNSW a couple of times a year and hoping that LCRK will be the host club. Get in touch with me if you're interested.

## Nature Notes

After the ducks, the white-faced heron, egretta novaehollandiae, is possibly the most commonly-sighted bird on the Lane Cove river. It stands up to 65cm tall and is usually seen wading in the shallows and mangroves.

Mostly grey-blue with white face, long slim neck, pointed grey-black bill and yellow legs, they are the most common heron and found throughout Australia except the centre. Also in Tasmania and from Indonesia through all the northern islands down to New Zealand. Their habitat is anywhere near water, be it tidal mudflats, coastal marshlands or urban gardens.

Their diet includes small fish, invertebrates, insects (and the goldfish from my pond!) obtained by disturbing

### by Jon Harris

and searching out prey, or simply standing motionless and watching for movement. They will

take prey from shallow water but don't dive.

Breeding season is from October to December but can vary depending on rainfall. The parents share nest-building, incubation and rearing. The nest is an untidy construction of sticks and debris in a branch above the highwater mark, with about 4 eggs per clutch.

They take flight when approached but can become

quite bold – years ago I used to handfeed one on my boat moored in Pittwater. Flight is slow, rhythmic and bouncing, with neck folded and legs trailing, and a rough, croaking call.



7

# Wednesday nights at the pontoon with Wade Rowston

The last few months have seen bumper attendances culminating in an all-time record of 54 paddlers on March 6. That beats the previous record of 53 which was the celebrity paddler fund-raising night held at Wirong Flat about 8 years ago. I believe there were actually a couple more paddlers but without numbers their result was not recorded. Many thanks to timekeepers Jana Osvald, Trevor Waters and Nigel Colless (who assisted at the last minute) for a great job, particularly when the clock did not start correctly (timekeepers nightmare)!

Phil Geddes, with a recent birthday and a strong paddle on Feb 20, now joins the elite group of paddlers who have beaten their age for the 12km in a single kayak. He joins paddlers like Tony Hystek, Tony Carr and Don Andrews who continue to regularly beat their age over the time trial course. Check out the new 'Honour Board' page on our website for more paddling achievements and club history.

The Crudslime and Coffee Cups have got off to a very interesting start with those who have managed to turn up for all three Cup nights so far jumping to the top of the table. Keep in mind that your best 9 finishes will count toward your point score at the end of the year and there is a long, long way to go. Everyone is still in with a chance.

In the Crudslime Cup over 12km, Phil Geddes has gone to the top of the table and leads by a solitary point from Tony Hystek, and then in third is Paul van Koesveld. Richard Robinson sits quietly back in the field with two very high placing rounds which puts him in an excellent position later in the year if he can continue with top 10 placings.

In the Coffee Cup defending champion Tracey Hansford has resumed her place at the top of the table but has to contend with genuine challengers this year. In second place is the improving George von Martini, then Marie Carr in third and Ruby Gamble in fourth.

This year has also seen the introduction of a "reverse direction" course on the 3<sup>rd</sup> Wednesday of every month and it has been well received. Starting at the Epping Bridge, but going in the opposite direction to usual, the fleet first heads toward the bottom marker near Figtree Bridge. The turnaround for the

6km is at the channel marker just in front of the sandstone cliff face. Also introduced this year is an option of a 9km course for those wanting an



LCRK's Clean Up Australia team of Wade Rowston, John Duffy, Jon Harris, George von Martini, Tom Holloway, Rob Grozier and Jeff Tonazzi collected a car tyre, shopping trolley, large sheet of heavy duty plastic and about 12 large bags of glass and plastic bottles from the mangroves at the high water mark and only accessible by kayak. The shopping trolley was found under the Epping Rd Bridge and was transported across the river by rafting a couple of kayaks together and having the shopping trolley straddled across both of them. Rob also found a very large mud crab but unfortunately, or fortunately given the size of its claw, it was dead. It was about 22cm in diameter. Another thing to think about for those of us trying to relax while attempting to paddle a K1.

intermediate paddle while transitioning from 6km course to 12km. The turnaround point is the marker way over to the right just after passing Blackmans Beach then Sugarloaf Point.



There have also been a number of coaching sessions by Don Andrews and Tony Hystek conducted prior to the time trial which have been very well received. Also we have had a number of "come and try" nights where newcomers come along and try kayaking. Tony has also assisted with these as well as Rae Duffy, Jon Harris and myself.

Just a reminder that it is now compulsory that you have two white "be seen" lights attached to the bow and stern (one each end) of your kayak, and a PFD must be worn. The white lights must be attached to your kayak, not your PFD. The lights and PFD are a maritime requirement. Please ensure you comply with this requirement will be otherwise you deemed not to be participating in the time trial. Thanks for your cooperation!

Finally, welcome to new members Chris Quirk, Jane Carter, Michael Day, Jen Broadbent, Amanda Clegg, Imogen Ellis and Oscar Cahill. It's great to have you aboard.

Happy paddling!



Congratulations from all at LCRK to Jason Cooper and Carmen Ellis who have announced their engagement. They had a Valentines Day dinner in town and that's when Jason proposed. They have bought a house in Wahroonga and have set the wedding date for May 11. "We should still be together even though we are on opposing teams in the Kayak 4 Kids, and my team plans on beating Carmen's team," said Jason. Carmen said: "We are super happy. Who would have thought LCRK was such a love nest!"



Kenji Ogawa returns

| Timekeepers             |                                 |  |  |  |  |  |
|-------------------------|---------------------------------|--|--|--|--|--|
| Apr 10                  | Richard Lindsay,                |  |  |  |  |  |
|                         | Michael Mueller                 |  |  |  |  |  |
| Apr 17                  | Chris Thompson,                 |  |  |  |  |  |
|                         | Andrew Mathers                  |  |  |  |  |  |
| Apr 24                  | Tracey Hansford, Ian            |  |  |  |  |  |
|                         | Wilson                          |  |  |  |  |  |
| May 1                   | Tim Binns, Neil Duffy           |  |  |  |  |  |
| May 8                   | Adrian Clayton, Toby            |  |  |  |  |  |
| M 45                    | Hogbin                          |  |  |  |  |  |
| May 15                  | Amanda Clegg, Tom               |  |  |  |  |  |
| May 00                  | Holloway                        |  |  |  |  |  |
| May 22                  | Andrew Pratley, Tim<br>McNamara |  |  |  |  |  |
| May 20                  | literiaria                      |  |  |  |  |  |
| ividy 29                | Alanna Ewin, Tom<br>Simmat      |  |  |  |  |  |
| Jun 5                   | Jen Broadbent, Peter            |  |  |  |  |  |
| Juli J                  | Edney                           |  |  |  |  |  |
| Please                  | confirm your availability a     |  |  |  |  |  |
| week before with Andrew |                                 |  |  |  |  |  |
|                         | Mathers at roster@lcrk.org.au.  |  |  |  |  |  |
|                         |                                 |  |  |  |  |  |
|                         |                                 |  |  |  |  |  |

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