



P.O. Box 455
Mermaid Beach, Qld. 4218.

QMM Newsletter October 2016

Events Calendar

.Golf Day Mudgeeraba: 16th October, Boomerang Farm, Mudgeeraba.

Sunshine Coast (QSC): LC Kawana Aquatic Centre, 22nd October.

Pan Pacs Masters Games: LC Southport (SAC), Qld, 5th- 11th November.

MSA National Titles: Southport, Qld (SAC), 8th – 11th March, 2017.

World Masters Games: Auckland, N.Z., 21st – 30th April, 2017.

Great Barrier Reef Masters Games: Cairns, NQ., 26th -27th May, 2017

FINA World Masters: Budapest, Hungary, 4th – 13th August, 2017

Committee News

- Our last committee meeting was held back in August. Margie Watts was given the go ahead to organise the design, marketing etc for our special social shirts for the club. It's to be hoped that those people competing at the Pan Pacs next month will buy them and be seen in these dazzling new shirts.
- Carole Simpson unfortunately has had to resign from her position as Race Manager. Let's hope she soon recovers from her serious illness and is soon back on board. With her positive attitude one bets she will. Colette Southam has now taken over as Club Treasurer from Mark Sutton.

- A club night out at the Australian Outback Spectacular was mentioned for late November or early December. Don't know whether there are any concrete plans yet, but if anyone's interested, please let members of the committee know.
- Considering that the State/ National titles are replacing our own carnival early next year, we're contemplating holding a carnival later in the year, perhaps September. It's a good opportunity to offer something different such as an all relay or long course distance meet. Our own event is our one opportunity to make some decent money to keep our books in order for the coming year.
- We've decided to leave the club fees component at the 2016 level. We've maintained the present system for a few years and there seems to be few complaints. No doubt prices will rise, but not quite yet.
- The committee unanimously decided to support Zac Kimber and his quest for glory over in NZ. We earned a goodly sum for working at the Gold Coast Marathon, so what better place for that to go to than to help Zac.

Committee Members

President: Lance Kunde (president@miamimasters.com.au)

Vice-President: Greg Brennan (vp@miamimasters.com.au)

Secretary: Georgie Hartley (miamimasterssecretary@gmail.com)

Captain: Noah Southam (captain@miamimasters.com.au)

Race Director:

Vice-Captain: Liala Davighi (lialamckee@bigpond.com)

Treasurer: Colette Southam (csoutham@bond.edu.au)

Registrar: Kathy Carlyon (registrar@miamimasters.com.au)

Endurance Director: Tracy Brennan (tradleyb@gmail.com)

Recorder: Denise Robertson (robertson.denise@bigpond.com)

Merchandising: Margie Watts (margiew1@hotmail.com)

Gear, Safety and Newsletter: Peter Mitchell (pdmitchell01@hotmail.com)

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: Kathy Watt (katherinewatt@bigpond.com)

Lane 11: Owen Lawrence (bjair@bigpond.com)

Miami Club News

- Lovely day out at the Boomerang Farm Golf Course for our annual Miami Masters Golf Day. Pix and results next newsletter.
- We enjoyed a most pleasant day timing for the Miami Swim Club's carnival a few weeks ago. The kids' swim meets always seem to go so much quicker than for the oldies. Guess we have a greater variety of events, but we are a lot slower than we used to be, one supposes.
- Sad that we had to farewell our long time QMM member, Geoff Ross, who died on the 29th of September. It was great to see all those present and ex QMM members who attended his funeral at the Tweed Heads Anglican church. Geoff had reached the good old age of 85, but his heart had begun to let him down over the last few years and he could no longer do those things he loved doing: generally anything to do with the surf, the pool and buying new cars. In presenting her eulogy for Geoff, his granddaughter, Hanna, delighted us with some of the tales of Geoff's life. He always woke early, headed off with chair on head to swim with the Motley Crew at the Currumbin Estuary, and then did what he had to do for the day. Geoff hated dogs whether they were on a lead, off a lead, indoors, outdoors, anywhere. He was certainly not happy after being severely scratched by an Alsatian in the Estuary one day. One could go on, but he will definitely be missed.
- The Burleigh Heads SLSC are holding their annual open water swim on Sunday, the 30th of October: 1 km or 2 km. Can be a real challenge but mostly good fun; just depends on conditions on the day. Anyway, plenty of support hanging around.
- We're having another endurance session this Sunday morning the 23rd at 10.00. Word from Tracy is that we're up on last year's effort and look like finishing better. This is a good chance for members who would like to do a longer swim, or two. If you'd like some more info about the program, check it out on the website.
<http://mastersswimming.org.au/Programs/Vorgee-Endurance-1000>
- Sad to farewell two of our long serving members, Pauline Benjamin and Phil Marshall who've both gone to be closer to their children in Melbourne. It's sad to see them leave as they've both been such enthusiastic and valuable club members over such a long time.
- Well our high achievers Hobe and Helen are back in town after doing the northern summer and ready to tackle the pool, the open water, the golf course and whatever else they fancy. Great life they have.
- Don't forget to order your social shirt from Margie margiew1@hotmail.com They're selling pretty well and we're certainly going to look a sight at the Pan Pacs.
- Best wishes for everyone who's nominated for the Pan Pacs at Southport Pool next month. Hope the weather's fine, you take home heaps of medals and most of all, enjoy yourself.



WEDNESDAY SEPTEMBER 14 2016 NEWS 09

Disability proves no barrier for swimmer

LAURA NELSON
LAURA.NELSON@NEW.COM.AU

HAVING a disability can make for a lonely life but sport and work have proved a game changer for Zac Kimber, who is training for the 2016 Special Olympics Trans-Tasman Tournament.

"Swimming has been good for me and I like doing it. I've met lots of people — even Ian Thorpe," Mr Kimber, 27, said. "I like running too, but my dream is to swim in the Olympics."

With an impressive medal count to his credit, he will be competing in the 1500m freestyle, 200m freestyle and 100m fly events, as well as in relays, in the November tournament.

Mr Kimber, from Ashmore, started swimming in 2003, but his mum, Tanya, said he wasn't particularly good at it.

"He wasn't always sporty but he joined Gold Coast Rec and Sport and they introduced him to all these activities. He got better and better, grew in confidence and then started to compete," she said.


He was selected to play soccer at the Special Olympics Junior Nationals and was advised to also find another sport to compete in.

"His sports master at school, who was absolutely fantastic, gave him extra lessons and before long, he was picked for the Special Olympics Nationals as well qualifying for the mainstream multi-class events at nationals," his mum said.

Work is another area where Mr Kimber has found his niche and he is a supported employee at the Endeavour Foundation's Southport site, where he assists with recycling electronic waste.

Endeavour Foundation southeast Queensland committee chairman Bernie Scobie said everyone had a part to play in building a more inclusive and disability-friendly community, by removing barriers and changing the way we think, talk and act.

To find out more about the Endeavour Foundation, visit endeavour.com.au.



Zac Kimber is training for the 2016 Special Olympics Trans-Tasman Tournament.

Thanks for the Gold Coast Sun for letting us reproduce their article on Zac Kimber. Most of us probably live too far south to catch this edition, so here it is. Zac's also competing in the Pan Pacs next month, pool swimming and the open water. He's going to be pretty busy soon and is training hard. He nominated for the 1 km in the ocean, and after getting a bit of a taste for it, has realised he should be doing the 5 km.



Here's a special pic from Denise Robertson competing at the World Titles at Kazan last year. Personally, Denise didn't consider her style too favourably. Don't know why! Reckon anyone who can still do butterfly at 80 can't be doing too badly. Anyone who can get both their arms out of the water at the same time while still moving forward, is doing pretty good.

Some old but important pictures.



Geoff checking out the conditions at Palm Beach. Think he was reminiscing about catching that wave from Currumbin Alley to where we were ie the dog beach.



Pauline at Presentation Night 2013.



Geoff and Phil at Lane 11.



Geoff laying down the law (Presentation Night 2013).



Phil and Lance



Carole and Pauline at Presentation Night 2014.

Volunteers for Pan Pacs Masters Swimming

As has always happened with the Pan Pacs Masters Swimming, Masters Swimming Queensland relies heavily on volunteers from its clubs. The meet will run from 8.30am to 3.30 pm on Friday, November 4th, Saturday, November 5th, Sunday, November 6th.

You can volunteer for timekeeping and /or other duties in the following ways:

On each day:

1. Morning Session: 8.30 am – 12.30 pm approx
2. Afternoon Session 1.00 pm approx. – 3.30pm

For one day, for two days or for three days.

We will provide food and free parking.

An option could be for members of your family, non swimming partners or sons and daughters to volunteer.

Timekeeping is really easy. You just have to press a plunger[watches will not be used.] Other tasks like distributing food to officials or assisting at the medal table are quite easy and stress free.

With profound gratitude for any help you can provide,

Brian Davis, Pan Pacs Masters Swimming Convenor

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Surfing in the 'Snow'donia National Park

From Alan Grant

On my recent trip to Wales I met up with Steve, an old surfing mate from over 40 years ago. We decided to make the long trip (over 4 and a half hours each way) to the new surfing Mecca in North Wales, Surf Snowdonia. After the beautiful trip through the Welsh mountains and past the ugly slate quarries near Betws-y-Coed, we arrived at the large man-made lake (100m x 300m) set in the mountains. We had to sit around watching the action for over an hour getting the hang of the break. Then it was on with the wet suits for the 18C water. It's a little un-nerving hearing the sound of the mechanism

powering up and then seeing the wave jump up and start towards you, but I caught a few in the hour allotted (\$100) but waves to yourself and a commendation from the life guards at being the second oldest to have ridden any waves. The board (with no wax which I complained about) and the plastic beach

were both very slippery but it was heaps of fun. A fish and chip supper, followed by a pint of Old Peculiar at the appropriately named Welshpool half way back, made it a great day out.





I grew up in Toowong, Brisbane, where our house overlooked the Brisbane Boys College football oval. (This was to become useful in teenage years.) Anyway, I was the fourth-born into a family of girls – hurriedly pushed into the world by a boy at last – my twin brother Doug! My father was good at sport and when Doug didn't show much interest in it, it was lucky old me who was woken at 5.00 every morning to be taken to swimming training, athletics training or whatever was in season. Admittedly father would bring in a cup of tea for me to help ease the pain. I'm afraid I was a big disappointment to him as I trained in a very lazy manner and never really lived up to his expectations. (I wish he'd been around to see me swim in Russia last year!)

However, we had a happy childhood. My closest sister and I were best friends with the headmaster's daughters at BBC and we had ballet lessons in the school gym and spent a lot of time there. Those readers of a similar vintage will remember the early days after the War. I think rations cards were still around, many goods were scarce and we grew up realizing that you didn't waste anything. Our State School had two bins for 'recycling' – one for papers, etc. – the other for food scraps. (There were no plastic bottles or aluminium cans.) A local farmer came and took away the contents of the food bins once a week to use as pig feed. At home we grew a lot of our own vegies so we didn't go without.

Mum loved holidays and made sure ours were memorable. After we finally got a car, we had trips to Sydney and the Blue Mountains and to Heron Island, but our favourite destination, every Christmas, was a little backwater south of Gympie, called Noosa Heads. There would be mostly Gympie people holidaying there and no more than twenty shacks and two boarding houses in the town. We kids roamed free – gone from dawn till dusk. We stayed in a fibro cottage (divided down the middle into two flats) right on the beach and Mum would hang a towel over the verandah rail when it was time to come home for lunch and dinner. In our teen

years, father, the maths teacher, decided he'd like to build a beach house himself. Having been raised on a sheep property and learning to erect fences, etc, he knew he had all the skills. First he drew up the plans. In those days, it was done on blue paper, using a pen you dipped into white ink – 'blueprints'. You needed a very steady hand – a work of art! Then the build began. We younger ones copped the brunt of it and worked as builder's labourers every weekend and holiday for a couple of years. We finally enjoyed many great holidays at our 'mansion' in Maroochydore – and it is still standing. (I worry that not a lot of care was taken with the fabulous new asbestos sheeting we used!)

I grew up with no great notion of what I wanted to do. Mum found you could get a teaching scholarship from Junior which helped pay the school fees through my senior years – so there I was – following the family tradition with none of the fervour needed to be a great teacher. Still I met some nice people at college, including my first husband, as well as one of our Miami swimmers, and we had a busy social life.

Out in the real world, I taught for a few years, got married and had three kids as we travelled around

Queensland and Victoria with my husband's work. Motherhood tends to 'grow you up' quickly, but fatherhood didn't seem to work that way (in the 70s anyway). So after eleven years we parted company and a year later I found that my first boyfriend, David, was also raising three kids on his own after the death of his wife. We got together, had a daughter Anna a year later, and suddenly had a family of seven. We somehow survived and I even managed to do some more study, work a bit, and finally pursue my interest in history to write and publish some little books.

Then the kids started leaving home. We downsized once to be near our golf course, then tried a retirement move to an apartment on the river. This didn't work out so we

decided to build a sustainable house at Jacobs Well. We figured this was halfway between Brisbane and South Straddie where we now like to holiday.

For years I had thought about getting back to swimming and started doing a few laps just for fitness. When I looked into joining a Masters group, I found we were equidistant from Chandler and Miami, but really closer to Southport. At that time the Southport pool was closed for renovations, so we decided to join Miami until it reopened. We paid up for three months but we found we enjoyed our new friends so much (and found them so inspiring) we just had to stay. I wouldn't say swimming has taken over our lives, but we find it a great excuse to travel. So far it has taken us on the Trans Siberian railway, to Adelaide and we have booked for New Zealand next April. It's also a great excuse for weekends away – Noosa, Toowoomba, Hervey Bay and the Sunshine Coast, etc. We still manage to fit in a lot of

travel, golf, tennis and walking, as well as spending time with the eighteen grandchildren. David retires completely later this year, so I imagine we will soon be hanging up the goggles and quietly putting our feet up for good??



Lactic Acid Legs



The complete renaissance woman: the waterslider, backstroker, champion flower arranger and poet.

I have always been a swimmer

And I know that black line well.

I have swum in many races;

There was one that seemed like hell.

I have known success and failure

And yes, it's always nice to win.

It takes many miles of training

To achieve that winner's grin.

At 60 plus I fronted up

To swim a 200 back.

I'd trained a bit and thought that I

Had finally got the knack.

I didn't think I'd beat them all	The first two laps were easy street	For the first time in my racing life
But I might just get a place.	But the third filled me with dread.	I then thought of pulling out.
And if I concentrated hard	I suddenly was battling with	The searing pain and useless legs
A strong kick might help me race.	Two legs - apparently dead.	Surely ten times worse than gout.
I'd studied champion swimmers	A lead weight had attached itself	But worse than that was failure to
On the big set TV screen.	To both my upper thighs.	Complete the total distance.
If I just increased my leg power	I'd a lactic acid build up	I limped along and grasped the
I could be that mean machine.	Where power literally dies.	end
 	 	No victory in this instance.
The gun went off, I started well	Now lactic acid legs are bad	The moral of this story is
With no signs that I would fade.	For they hurt like bloody hell.	To follow your own life plan.
I worked my legs and they felt good	I'd still another lap to go	Forget what all the gung hos do
I thought, "Gee I've got this made."	And things weren't going well.	And do what you know you can.

Kathy Watt

Masters athletes DO take longer to recover.

Peter Reaburn

Anecdotally, my own extensive experience and years of talking with high level masters athletes from many sports tells me they will all say the same thing - the older I get, the longer it takes to recover from training or racing or I don't bounce back like I used to.

I am now in position from my own research team's work to say answer that long-asked question "Do older athletes take longer to recover?" Our research strongly suggests older athletes DO take longer to recover from muscle damaging exercise such as that undertaken by masters swimmers during sprint training, weight training or at swim meets.

Previous Research Findings

Few studies have examined recovery in older athletes. In 2008 one of my former PhD students, now Dr Jim Fell from the University of Tasmania, compared actual performance and perceptions of soreness, fatigue and recovery in veteran versus young cyclists over three consecutive days of doing 30 minute cycling time trails per day. While we found no differences in cycling time trial performance over time in either age group, the veteran cyclists perceived they took longer to recover. They also felt they were more fatigued and sorer each day compared to the younger cyclists.

In 2010, a French research group compared recovery rates in 10 young (30.5 ± 7 years) and 13 master (45.9 ± 5.9 years) athletes who competed in a

55-km trail run race. The researchers measured quadriceps muscle strength and muscle electrical activity, blood markers of muscle damage, and cycling efficiency before, then 1, 24, 48 and 72 hours after the race. The older athletes took longer to recover in all measures.

Taken together, the above results suggest that older runners who damage their muscles in training or racing appear to take longer to recover. It also appears the older athletes perceive they take longer to recover.

Our Own Very Recent Research Findings

In a recently published review, one of my PhD students, Nattai Borges, concluded that masters athletes recover muscle function and athletic performance at similar rates to younger athletes following fatiguing, non-damaging exercise such as cycling or low-impact resistance training. However, following exercise that results in exercise-induced muscle damage, such as prolonged or hard running, older athletes may require longer to recover than younger athletes.

'So why is it so?' as Professor Julius Sumner Miller used to say (remember him?). Previous research groups have identified that an elevated rate of muscle protein synthesis (building) is vital to the repair and remodelling of skeletal muscle. It is well-known that older untrained adults display age-related 'anabolic resistance' in the muscle rebuilding. That is, older inactive people don't repair their muscle as quickly as younger people. Interestingly, previous researchers have shown that both exercise and protein feeding stimulate protein synthesis in older untrained people. But what about older athletes who both exercise regularly and eat protein?

My research team decided to investigate whether this anabolic resistance persists in masters athletes and thus, whether it contributes to the poorer muscle recovery observed in this group. Despite it being widely accepted that older untrained adults require ~40 grams (g) or ~0.40 g/kg of protein post-exercise, current sport nutrition recommendations do not differentiate between masters and younger athletes with the recommendations for all athletes, regardless of age, currently being ~20 g of protein consumed immediately post-exercise. Whether or not masters athletes consume this amount of protein post-exercise, or whether this currently recommended dose is sufficient to elevate muscle protein synthesis essential for muscle repair and remodelling to levels equivalent of younger athletes, had yet to be determined.

Here is what my team did in a series of three studies to investigate these matters.

Study 1

Using survey methodology and the support of Triathlon Australia, we set out to compare the post-exercise nutritional practices (protein and carbohydrate intake) of masters athletes to both younger athletes and current sport nutrition recommendations. We showed that masters triathletes typically consume post-exercise meals/snacks that contain a significantly lower amount of carbohydrate (0.7 ± 0.4 g/kg) than younger triathletes (1.1 ± 0.6 g/kg). We also showed that the masters triathletes fail to meet current post-exercise carbohydrate intake recommendations. In addition, we also showed that, despite masters triathletes typically consuming protein intakes that meet current sport nutrition recommendations (20 ± 14 g), the protein intakes of the older triathletes were significantly lower than those doses consumed by younger triathletes (0.3 ± 0.2 g/kg vs 0.4 ± 0.2 g/kg). These results suggest older athletes need to consume more carbohydrate post-exercise. Moreover, older athletes may need to focus more on post-exercise protein intake.

Study 2

We then set out to compare the muscle protein building rates of masters and younger triathletes over three consecutive days of intense endurance training. Recovery of cycling performance, following muscle-damaging running, was also compared between groups.

Five masters (53 ± 2 years) and six young (27 ± 2 years) trained triathletes volunteered for the study. The athletes completed a muscle-damaging 30 min downhill run after which three 20 km cycling time trials were completed 10, 24 and 48 hours following the run. Saliva was collected each morning and thigh muscle was biopsied before the run and then again 72 hours following the run so we could measure the rate of protein building in the young and older

athletes. Diet was controlled throughout the study.

Over the three days, masters triathletes showed a significantly lower protein synthetic rate ($1.49 \pm 0.12\%$ /day) compared to the younger ($1.70 \pm 0.09\%$ /day) triathletes. There was also a trend for masters triathletes to produce a slower cycle time trial (-3.0%) compared to younger triathletes (-1.4%) at 10 hours post-run, in comparison to baseline. The between-group comparison of change in performance was moderate suggesting a slower rate of cycling performance recovery in the masters triathletes.

Study 3

So, given that previous research from older untrained people showed increasing protein intake after exercise may be needed to overcome the anabolic resistance to rebuilding muscle, we set out to see whether repeated intakes of 'higher' doses of protein (0.6 g/kg) compared to doses of protein currently recommended by sports dietitians (0.3 g/kg) lead to enhanced same-day recovery of muscle function, perceptions of recovery, and afternoon cycling performance in masters triathletes following muscle-damaging running.

Eight masters triathletes (52 ± 2 years) completed two exercise trials separated by seven days. Trials consisted of morning strength testing and a 30-min downhill run followed by an eight-hour recovery. During recovery, a moderate (0.3 g/kg) or high (0.6 g/kg) protein intake was consumed in three feedings at two hour intervals commencing immediately post-exercise. Strength testing and a cycling time trial were completed post-intervention. Perceptions of recovery were also assessed pre- and post-exercise.

The high protein intake did not significantly improve recovery of cycling performance compared with the moderate protein intake. However, the high protein intake provided a moderate beneficial effect in lowering the loss of afternoon strength (-3.6%) compared to the moderate protein intake (-8.6%). In

addition, the high protein intake provided a large beneficial effect in reducing perceived fatigue over the eight-hour recovery compared to the moderate protein intake.

We concluded that doubling the recommended post-exercise protein intake did not significantly improve recovery cycling performance in the masters triathletes. However, we believe the higher protein intake provided moderate to large beneficial effects on muscle strength and power recovery that may be meaningful following muscle damaging exercise.

Conclusions

Taken together, our series of studies suggest that regular training into later life by masters athletes does not appear to offset the age-related impairments in muscle protein metabolism, and that higher protein feedings may be beneficial to recovery for subsequent training or competition performance.

Implications

So what do we recommend based on the above research? Here are our recommendations to veteran athletes:

1. We recommend that that masters athletes consult a sports dietitian to determine convenient and appropriate post-exercise dietary options that contain optimal carbohydrate and protein contributions for differing training scenarios (i.e., one vs. two training sessions per day) as well as adequate protein intakes to maximise muscle protein repair and remodelling

following muscle-damaging exercise such as sprint training, high intensity interval training, plyometrics and weight training.

2. Masters athletes completing two training sessions per day should maximise the duration of the recovery period (i.e., early morning and late afternoon). Alternatively, following exercise that results in muscle damage such as weights or hard training, it should be expected that exercise performance will be reduced for up to 24 hours.

3. Masters athletes should consider implementing age-specific dietary protein strategies. Specifically, increasing their post-exercise protein intake to ~0.4-0.6 g/kg and consuming high quality leucine-rich whey (milk-based) protein, particularly if previous training has resulted in muscle-damage.

4. Masters athletes should consider implementing the above dietary protein strategies, namely increased dose of protein at all main meals and post-exercise to optimise daily protein synthesis rates for muscle protein remodelling and thus facilitate adaptation to training.

5. Given some of our research team have previously shown masters athletes to be poor users of recovery strategies, the recovery strategies shown in Table 1 below have been shown to enhance recovery in athletes.

Table 1: Ratings (High and Medium-High) of commonly used recovery strategies.

High (H) Medium-High (MH)

Contrast water treatment (H)

Active recovery (MH)

Compression garments (H)

Water therapy (e.g. spas) (MH)

Ice (H) Massage (MH)

Stretching (H) Pool work (MH)

Nutrition (NB Carbohydrate & Protein) (H)

Sleep (MH)

The bottom line is we older athletes need to use what science says works, not waste valuable family, work, leisure and training time on strategies that waste our time or even worse, no recovery strategy at all!! Get to it fellow masters athletes – train hard, recover harder and recover smarter! For specific details and realistic advice on how to recover using all the methods outlined above, see chapter 15 of my book *The Masters Athlete*.

Peter is one of the founders and currently an active member of Miami Masters. He has just accepted an offer to become Professor and Head of Sport and Exercise Science at Bond University starting October 4.

Some more useful info from Rob.

It would be great to swim like a penguin, but who'd fancy all that freezing water, and raw fish. And evading killer whales and their ilk.

Plumage releases air to propel body out of water: emperor penguin



Emperor penguins are able to launch out of the water by overcoming forces of gravity by increased speed due to air lubrication in their plumage.

The Emperor penguin has a unique strategy for exiting the ocean - one that enables it to launch from the water and land one to two meters away on an icy ledge. The penguin is able to "torpedo" in such a fashion because air lubrication increases its swimming speed prior to jumping from the water.

Before exiting the water, the penguin swims at the surface, where it is believed that it loads its dense coat of feathers with air via grooming. The bird then dives to a depth of 15 to 20 meters. During this dive or at the bottom, it depresses its feathers, thereby creating less space for the air to be stored and releasing micro-bubbles. Throughout its ascension, the penguin releases these bubbles in a controlled way, creating a layer of micro-bubbles over most of its body surface. This lubrication layer reduces drag, enabling the penguin to swim faster and to overcome gravity so that it can successfully launch from the water.

Check out this and other fascinating facts about the natural world at www.asknature.org

Birthdays

September: Owen Lawrence 4th, Ben Austin 8th, Des McGovern 9th, David Salter 11th, Mark Fitz-Walter 14th, Noah Southam 21st, Sue Bertram 26th, Mark Sutton 27th, Tracy Brennan 30th.

October: Graeme van der Vlugt 2nd, Alan Carlisle 5th, Ken Winter 13th, Troy Doyle 21st, Ross Beaton 27th, Hobe Horton 27th, Margaret Watts 27th, Denise Robertson 29th.

November: Elzbieta Shneider 3rd, Mark Davis 5th, Mark Eaves 5th, Sandra Rogers 7th, Sarah Stubbs 11th, Robyn Kelly 15th, Joan Patterson 19th, Vanessa Teece 24th, Rod Greensill 25th.

December: Julie Ryan 8th, Lance Kunde 10th, Leanne Rickwood 12th, Rob Findlay 14th, Judy Bonning 16th, Lisa Rowlands 28th.