Believe

We believe in working together.

COROLLA
CELEBRATES
50 YEARS IN
NEW ZEALAND

C-HRIS LAUNCHED

PROJECT JONAH:
DIARY OF A STRANDING

SAY GOODBYE TO FIGHTS IN THE CAR



ISSUE FIFTEEN 2017

Contents



A Cool Experience in Antarctica – Alistair Davis Toyota New Zealand CEO and Chair of the Sustainable Business Council of New Zealand spent a week as a guest of Antarctica New Zealand in February. He recounts history, plots his adventures, and provides readers with an in-depth summation of life in the southernmost continent at New Zealand's Scott Base.

Say "goodbye" to fights in the car The Parenting Place provide some useful tips on how to manage the age old problem of kids fighting in the car Toyota New Zealand and the Parenting

Place launched Toyota Family Journeys essentially providing a roadie survival kit for Kiwi families.

Happy 50th Anniversary Corolla There's nothing that defines Toyota's spirit, heritage,

strength and confidence quite like Corolla. We look through the 11 Generations of Corolla.

Thinking Beyond the Gate Two ambitious bright Kiwis launch Halter, with a longterm vision of fenceless farming.

Motorsport

Christchurch drivers Ryan Yardley and Jack Milligan have handed CareVets team owner Keith Houston the perfect championship result. All three of this year's New Zealand contingent in the Castrol Toyota Racing Series (TRS) have used their summer racing experience to springboard themselves into international motor racing.



Kirsty Morris-Rickard Editor

Editorial

Disclaimer: Toyota NZ has made every endeavour to ensure that the text details and specification information contained in this issue of Believe are accurate as at 1 May 2017. Toyota NZ Limited reserves the right at any time to introduce any changes deemed necessary to improve the vehicles shown or for any other reason. For further information contact 0800TOYOTA.

Working together is the prevalent theme throughout the pages of issue 15. At Toyota New Zealand we have forged many long-term partnerships and are constantly making new relationships with various New Zealanders, our customers, businesses, associates and interesting people whom we come across. One of our eight Believe statements is we believe in working together, and this is evident in many ways.

One of our long associations has been with Emirates Team New Zealand and our support of the New Zealand sailing contingent who participate in the longestablished America's Cup. The world's oldest sporting trophy, the America's Cup was first contested in 1851 when the schooner America crossed the Atlantic and beat 15 British yachts. In the past 164 years, in battles on and off the water, the America's Cup has become the epitome of excellence in sport, where sportsmanship is rarely seen and oversized egos clash head to head in a contest that matches the best in the world and where there is no second place!

The last America's Cup was contested in the waters of San Francisco in 2013 and saw the AC72 catamaran yachts taking the sport to the next level, with winglike foils mounted under the hulls lifting the hulls right out of the water, resulting in phenomenal speeds. As we go to print, the 35th America's Cup is taking to the water in Bermuda, where a shorter-hulled Emirates Team New Zealand AC45 will no doubt not disappoint viewers with another exciting on-water battle. Be watching on 27 May at 8am New Zealand time.



Emirates Team New Zealand are based in Bermuda for the America's Cup – the most hotly contested on-water battle.

Alistair Davis, Toyota New Zealand CEO and Chair of the Sustainable Business Council of New Zealand, was a guest of Antarctica New Zealand in February. His visit coincided with the 60th anniversary of New Zealand's presence in Antarctica and the establishment of Scott Base. In lieu of his usual editorial, Alistair recounts some history, plots his adventures, and provides readers with an in-depth summation of life on the Earth's fifth largest and southernmost continent through his eyes.

We also include a moving piece from Daren Grover, General Manager of Project Jonah, who works with the Department of Conservation, trained medics and members of the public to help whales survive strandings. Earlier this year New Zealand witnessed the largest whale stranding in our history. In Daren's 'Diary of a stranding' he provides an insight into a huge operation that relies on the support and quick voluntary action of hundreds of compassionate Kiwis, both trained and untrained in administering first aid and calming the gentle giants, all with the aim of re-floating them and returning them to deeper water.

It's Corolla's 50th birthday this year, so it's fitting to commemorate one of Toyota's mainstay vehicles; after all, we can all say that Corolla has touched us in some way in our motoring lives, be it as our grandparents' first Japanese vehicle or the car in which we learned to drive. In whatever way it has had an impact on us, as a company we owe much thanks to the model that was introduced globally five decades ago.

of Conservation, trained medics and members of the

public to help whales survive strandings.

We also include a meaty section on motorsport, including coverage of Australian Thomas Randle emerging as a deserving champion in the Castrol Toyota Racing Series for 2017, Jack Milligan won the rookie title in the Toyota 86 Championship series (with a race to spare), helping Yardley in his unstoppable run and champion race driver Nick Cassidy competing for the TOM's team in Super GT and for the Toyota Racing Series, setting him on the path to becoming a full-time driver.

There's something for everyone inside the pages of issue 15 - enjoy!



ALISTAIR DAVIS

IN MY ROLE AS CHAIR OF THE SUSTAINABLE BUSINESS COUNCIL AS WELL AS CEO OF TOYOTA IN NEW ZEALAND, I SPENT A WEEK AS A GUEST OF ANTARCTICA NEW ZEALAND IN FEBRUARY.

IT WAS A TIME WHEN NEW ZEALAND'S PRESENCE IN ANTARCTICA WAS A NEWS HIGHLIGHT WITH THE 60TH ANNIVERSARY OF THE ESTABLISHMENT OF SCOTT BASE, ACCOMPANIED BY TEDX TALKS AND A SERIES OF CELEBRATORY EVENTS.

HISTORY

The Antarctic was the last continent to be explored by mankind (and consequently is a place where humans have had relatively little impact). The great age of exploration started in 1895 with the first landing (the continent was only first sighted in 1820) and continued into the early years of the 20th century. Perhaps the most famous exploit was the contest between Briton Robert Falcon Scott and Roald Amundsen of Norway, as they each raced to be the first person to reach the South Pole in 1911. In the end the Norwegian won by just 34 days, and the dejected Scott and his team perished on the way home. It is after him that New Zealand's base is named.

But of almost equal fame are the adventures of Sir Ernest Shackleton, who led three expeditions to the continent, including one in 1909 when he almost reached the Pole, but sensibly turned back to ensure survival. As his wife Emily recorded later: "The only comment he made to me about not reaching the Pole was, 'A live donkey is better than a dead lion, isn't it?' and I said, 'Yes darling, as far as I am concerned!." But his most famous expedition was the ultimately unsuccessful Trans-Antarctic Expedition in 1914-17. His ship *Endurance* was trapped and then destroyed by ice in the Weddell Sea, forcing the crew to camp on moving ice floes for over a year. However, they were unable to make land so eventually abandoned their attempt at a trans-Antarctic crossing and headed for Elephant Island in three lifeboats. They traversed the 557 kilometres in five harrowing days in the South Atlantic Ocean – and when they arrived on Elephant Island it was the first time they had been on land in 497 days. The problem was that no one knew where they were and Elephant Island was far from any shipping route. So Shackleton and five companions decided to take one of the lifeboats (just six metres long) and head for the whaling station at South Georgia, 720 nautical miles away. Just over two weeks later they made it (a remarkable

SHACKLETON'S HUT AT CAPE ROYDS



feat of navigation) and survived a hurricane that sank a 500-ton steamer in the vicinity. The next challenge was that they arrived on the uninhabited side of the island and had to call on their mountaineering skills to get over to the whaling station – this island traverse was not repeated for another 40 years. Shackleton then made four attempts to rescue the remaining team on Elephant Island, being foiled on his first three by sea ice. But eventually, four months after he'd left them, he rescued all 22, who understandably were sick of seal meat and many other privations. This is one of the greatest adventure stories - told in a gripping book called Endurance by Alfred Lansing.

New Zealand's connections with many of the adventures came through our nation being a base for the exploration of the continent – South America and New Zealand offered explorers the last suitable landfalls for restocking supplies before setting off to an inhospitable land. And of course Sir Edmund Hillary

also contributed to one of the great explorations in the mid-1950's. The Commonwealth Trans-Antarctic Expedition achieved what Shackleton had failed to do - make the first overland crossing of the continent. It was led by Vivian Fuchs, who started from the South American side, while Sir Ed started from the New Zealand side. Sir Ed's role was to set up supply depots from the Ross Ice Shelf to the South Pole, which Fuchs could use on the second leg. In fact, the New Zealand team reached the South Pole a few weeks earlier than Fuchs, and thus became the first land-based expedition to reach the Pole since Scott 46 years previously.

My adventures in the frozen continent were much more modest.

MT EREBUS SEEMS QUITE BENIGN

MY EXCELLENT ADVENTURE

I flew down on a United States Air Force Boeing C-17 Globemaster – a massive plane with four jet engines that covered the 3,500km in a little over five hours. It was clearly a plane for carrying cargo – no sound deadening, no windows and the seats were simple frames along the side of the fuselage. The massive central hold was full of equipment on pallets.

We landed on the ice shelf and the first impression on leaving the plane was the whiteness – it is bright and flat and seemingly goes forever (I later discovered that the Ross Ice Shelf is the size of France). Slightly concerned for our plane sitting on floating ice I enquired as to its thickness – 800m was the response!

The second impression was the contrasting environment – it was a cloudless day and the conditions seemed mild, even benign. But within five minutes I was starting to appreciate the latent hostility of the continent. The biting cold on any exposed skin, the glare that seared your eyeballs if you took off your sunglasses or goggles, the rugged conditions underfoot, and over it all the haunting presence of Hägglunds Erebus, which overlooks Scott Base and seems like a mild hill until you remember that you are at sea level and it is the size of Mt Cook – it is 40km away but seems much closer in the clear Antarctic air.

On arrival at Scott Base we were immediately given health and safety briefings, especially with respect to fire as not only is it a big risk in this driest of continents, but the normal escape of going outside is hardly recommended when the temperature might kill you if you are under-dressed for the weather.

The health and safety theme continued the next morning when we experienced several hours of survival field training (compulsory for all visitors). Before leaving New Zealand I had been provided with a massive amount of protective clothing: long johns, polar fleece trousers, water and windproof overalls, woollen socks, two different types of boot depending on conditions, polo top, two different types of jacket, balaclava, hat, goggles, four different types of gloves, etc. The whole point was that you could adjust your clothing to the weather and the types of task you had to do, although

CAMPING IN ANTARCTICA

BEWARE THE WIND CHILL EFFECT



once dressed in 'Michelin Man' Extreme Cold Weather (ECW) gear, just moving around was a challenge. In our training we literally learned how to survive for several days if something went wrong and we were stuck out on the ice in inclement weather. Whenever people left the base (even if only to drive to the neighbouring United States McMurdo Station, just 3km away), taking a radio and checking in at various points was compulsory. Also compulsory was an obsession with leaving no environmental footprint - all food and human solid waste is taken back to New Zealand (liquid waste is treated before being pumped back into the sea). That means when one is out on the ice one takes a pee-bottle and poo-bucket to ensure collection! One also must stay hydrated in such a dry environment - everyone carries water bottles with the helpful message of 'Hydrate or Die' emblazoned on the sides.

It is said that the English love to discuss the weather, but in the Antarctic the concept is taken to a whole new level, as survival depends on understanding what is happening and how to handle the climate. Around the base (and most helpfully in the locker room where one changes from jeans and a t-shirt into outdoor gear) there are signs showing the outside temperature and wind chill factor. It transpires that there are three basic conditions, the most dangerous of which, Condition One, which means limited visibility and the prospect of frostbite (i.e. dead flesh) on any exposed skin in less than five

minutes. We enjoyed Condition Three for our visit, which meant frostbite could be staved off for at least half an hour and most days visibility seemed only limited by the curvature of the Earth.

It turned out that this survival training was not just to ensure compliance with New Zealand's legal responsibilities – we did indeed have to survive on the ice, as part of our visit included a night outside! Actually to call it a night is an exaggeration as the sun doesn't set until late February. However, four visitors (plus a couple of experienced personnel) were dispatched in a Hägglunds caterpillar vehicle to spend a night 10km apart from most creature comforts. Three of the team cut themselves ice caves using blocks they cut out to create walls to shelter them from the wind. This was all a bit daunting for me (being somewhat less macho than my companions) so I chose to pitch a tent on the ice, and sleep in that (encased in three sleeping bags, I managed seven hours of sleep, far better than I expected!).

Another highlight was visiting one of the historic huts on Ross Island. Shackleton's hut at Cape Royds, from which he mounted his second expedition (when he nearly reached the Pole) has been restored to something close to its original state by the Antarctic Heritage Trust. As part of the restoration (which took eight summers to complete) three crates of Mackinlay's whisky (and two of brandy) were discovered under the floor. One crate was sent to Canterbury Museum for thawing and conservation. From there three bottles were sent to Scotland for scientific analysis by Whyte & Mackay (the owner of the Mackinlay's brand). They subsequently issued a limited edition replica of the historic whisky based on the results of their analysis (a small bottle retails for £135). The original crate has been returned to the underfloor storage at Shackleton's Hut.

WILDLIFE

In the course of my visit I saw Adélie penguins (slightly smaller than the famous Emperor) which were delightful in their antics as they crossed the ice floes together. They would waddle along (at quite a pace) in single file and when they came to an obstacle, such as a gap in the ice, they would consult one another before tackling the challenge. One would get through and then check on the next companion and so on until all had navigated the obstacle. Cooperative community in action.

I was also lucky enough to see pods of killer whales (orcas) porpoising along channels between the ice. Their power, grace and speed were spectacular and I was fortunate not to see any violence towards seals that would have marred the experience of their beauty.

In the immediate vicinity of Scott Base the most common wildlife were seals, of which many sunned themselves on the ice directly in front of the base. Where the ice shelf butts up against the island, huge pressure ridges build up creating wave-like shapes along with multiple fissures and cracks. The seals can come out of the water to sun themselves

in relative safety but can easily get back in the water to fish or cool off.

Our party ventured into the pressure ridges one morning. It was quite an adventure as it is a relatively unstable location with theice of varying thicknesses. We had both a 2m pole and a 1m drill (perhaps the ultimate power tool) to test ice thickness and strength. As the pictures testify, some spectacular ice formations are created under the pressure of a glacier against the land.

"IT WAS QUITE AN ADVENTURE AS IT IS A RELATIVELY UNSTABLE LOCATION WITH THE ICE OF VARYING THICKNESSES."





THE AMERICANS

New Zealand's Scott Base is located just 3km from the American McMurdo Station, which is about 10 times the size. There is massive cooperation between the two operations. New Zealand is basically dependent on ships bringing fuel and equipment, and regular US air support delivering fresh food, people, and other supplies. At the same time the US gets great cooperation from Christchurch Airport and Lyttelton Port as staging posts and the two bases are constantly working together.

A perfect example of that was seen with the three Meridian windmills that sit on the ridge behind Scott Base. For practical reasons these feed power to the US base, but in return for this

free feed of power from a New Zealand power facility the Americans provide us with a supply of their diesel fuel stock. In a harsh environment, cooperation is the best strategy to both survive and enhance the science work.

On touring Arrival Heights, where much of the atmospheric research takes place (including the monitoring of the ozone hole), the American operations are housed in New Zealand's more modern building and thus bring a whole extra level of equipment and scientific expertise to the table.

Also critical to survival on the ice are links to the outside world – both air and sea. Although New Zealand has its own helicopters, planes and land transport (including a number of Toyota Landcruisers), the airfields on the ice shelf and the roads around Ross Island and on to the ice shelf are largely maintained by the Americans. McMurdo also has a dock that in summer allows for supply ships to bring in bulk equipment, fuel and supplies. The dock is basically constructed from ice and access is determined by

sea- ice thickness and the ability of icebreakers to keep a sea channel open. While there, I had an opportunity to visit a fuel supply ship and see the icebreaker in action. The scale of these operations is daunting and New Zealand benefits greatly from its

WINDMILLS AND PRESSURE RIDGES



GEOGRAPHY

Antarctica is 14 million square kilometres which makes it twice the size of Australia and 30 per cent bigger than Europe. It is 98 per cent covered in ice sheet that averages about 1.6km thick. This constitutes about 70 per cent of the world's fresh water – if it all were to melt, the sea level would rise about 60m devastating most of the world's cities.

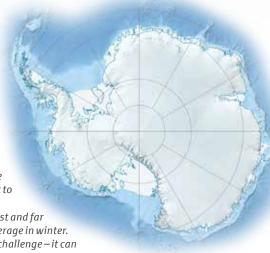
Large sections of the surrounding sea are covered in ice shelves – where glaciers have pushed out over the sea. One of the largest and closest to New Zealand is the Ross Ice Shelf, which is roughly the size of France. In winter, sea ice also forms, which makes the continent even bigger and icebreakers are required to carve through it to make landfall. The sea ice makes no difference to sea-level rise as it is formed from the sea itself. The potential sea-level rise comes from the glaciers coming off the ice sheet to form ice shelves and then melting.

The continent is the driest on Earth with 200 millilitres of annual rainfall on the coast and far less inland. The temperatures can be quite cold, with -63 degrees Celsius being the average in winter. For my visit it was a relatively balmy -10 to -15 degrees on most days. The wind is the challenge – it can drop the effective temperature dramatically knocking anything up to 20 degrees off the ambient temperature.

The continent is surprisingly high (the highest average elevation of any continent) – much of it is over 3,500m above sea-level, with the highest peak at almost 5,000m. For Kiwis, Mt Erebus is etched on our consciousness – it is the largest volcano on the continent and is about the same height as Mt Cook.

The Antarctic Treaty basically commits nations to using the Antarctic for scientific and peaceful purposes. Not every nation has signed up to the treaty, but other than science there is only a small tourism and fishing presence, both conducted from outside Antarctica. During summer there are around 5,000 scientists and support staff on the continent at 70 research facilities from 30 countries; in winter (when it is dark 24/7) the number drops below 1,000. At New Zealand's Scott Base this year only 11 are wintering over.

New Zealand's presence in Antarctica dates back to 1957 when Sir Edmund Hillary established Scott Base close to the US McMurdo Station on Ross Island. The island, 3,800km due south from Christchurch, is in the Ross Sea close to the edge of the ice shelf, on which the aircraft shipping people and supplies from New Zealand land several times each week during the summer.





The overwhelming activity undertaken at Scott Base is supporting scientific research. Each summer around 100 scientists travel to Antarctica to conduct various research projects and Antarctica New Zealand's role is to provide support for them. During the winter there is continuing research in the form of data gathering, but the scientific programme is heavily curtailed while it is dark. There are too many projects underway to describe them all, but many are related to understanding mankind's impact on the planet.

There are a number of projects relating to the Ross Ice Shelf (which is not only the largest in Antarctica but also important as a major extension of the ice sheet that covers most of the land mass). Understanding how rising air and sea temperatures (along with the acidification of the sea itself) affects on this massive body of ice is critical to our future on the planet. Some of this research is looking at what is currently happening, but some is also focused on understanding how stable the ice shelf is over a long period of geological time (when the planet has undergone similar climate changes to what we now face in coming decades).

Although Antarctica is largely covered in ice, some parts are relatively ice free – the nearby McMurdo Dry Valleys are a case in point. Here scientists are trying to understand how fragile ecosystems can survive the hostile conditions and how they will handle future climate changes. There is also a significant amount of work taking place under the ice to understand the impacts of ocean changes (in temperature and acidification) on the marine ecosystem.

There is also an extensive body of research into the atmosphere, most notably a continuous monitoring of the hole in the ozone layer. The ozone in the atmosphere is what helps to protect the planet from over 95 per cent of the sun's harmful ultraviolet (UV) rays. Although the amount of ozone in the atmosphere moves around

the planet due to temperature change and high-altitude winds, it was discovered more than 40 years ago that some of the chemicals in aerosols were depleting the total supply of ozone. In 1985 a major hole in the ozone layer was discovered above Antarctica. Within just a few years most nations of the world had taken action (the Montreal Protocol) to eliminate the numerous chemical substances causing ozone depletion. The result of combined global action has been a partial recovery of the situation; today the ozone hole still exists above Antarctica, but its presence is now just a matter of months each year when climatic conditions cause the hole to re-open. The progress that has been made gives one hope that similar action can avert a climate change crisis.

ALISTAIR DAVIS WITH ONE OF THE ANTARCTIC LANDCRUISERS

LIFE IN ANTARCTICA

The team at Scott Base are a mixture - there are scientists visiting to conduct research and study for brief periods before returning to their universities, Crown research institute or NIWA. There are a significant number of staff supporting that work: cooks, domestics (who keep the place clean and tidy), field trainers, engineers (who keep equipment operating) and a variety of other support services. The total headcount can vary between 11 (in the winter) to well over 100 (in the summer). At any one time, there will be scientists living out on the ice doing their research – they may not return to base for a number of days so they need to be supported remotely.

Remote locations may be supported by helicopter, ski-equipped Hercules aircraft and, Hägglund or a pisten bully. The last is a caterpillar equipped monster that can not only plough snow and transport half a dozen people in relative comfort, but also tow several containers that are effectively fully equipped mobile laboratories.

Of course for simple work around the base, travelling to McMurdo or even going out to the airfield on the ice shelf, a Toyota Landcruiser is ideal. Equipped with strong door hinges (the wind can be so severe it will rip a door off), grates to scrape snow off your feet, a heater to keep the engine warm when not operating and a change of fuel to avoid freezing, the vehicle is perfect.

Scott Base itself is a series of green buildings connected by enclosed corridors and ramps. The colour green is reputedly due to an early visit by a designer coming from an English village where the houses were white in a green countryside; he thought that green buildings in a white landscape would make a nice contrast. The linkage of buildings means that many people can complete a day's work without stepping outside. Inside the base the

The staff sleep in dormitories: four to a room with communal bathrooms and eating. The cooks put on three meals a day with good, wholesome food (again a contrast to McMurdo where burgers and pizzas seem to be common fare). There is a strong focus on avoiding waste so a meal may be repeated over several days: what may be beef steak one night could be a stew on a subsequent night. Everyone does their own dishes and there is a real sense of community as everyone eats together and shares what is happening in their particular role.

That sense of community carries on into recreational activities – with a limited amount of connectivity to the outside world, the team are very proactive in finding ways to

build participation and enjoyment into their non-work hours. Many of the summer staff will be involved in outdoor activities like mountain biking and even skiing – a number of enterprising Kiwis have established a small ski field on the side of Ross Island, complete with its own ski tow. However, for health and safety reasons the traditional ice dip (appropriately roped) is now a thing of the past.

In summary this is an amazing continent and there is inspirational work being done by Antarctic New Zealand to facilitate science in this most remote and at times hostile location. Thanks to Antarctica New Zealand for arranging and hosting this visit.







I know what you are thinking - is that even possible? Can riding in the car with your children be anything like enjoyable? Well, there are some things you can do to minimise the unpleasantness of children's fights and squawking from their seats. It is going to take some energy and forward thinking, but you will thank me for getting you from A to B in more style and niceness than you have ever done before. Take a look at these tips and aim to tackle at least half of them if you are after some great car trips with your family.



First things first, prep your kids.

Have some robust expectations and let your family in on them. Children have a way of adjusting to their parents' belief in their ability to be self-controlled and pleasant. If your kids hear you say they are rotten to be in the car with - they will be. If they hear you say that they can be awe some creatures to have as passengers, they will adapt.





Teach your children to win well and lose well.

Some parents have forgotten this one. Things sour pretty quickly when children are in constant competition with one another. This one takes some effort but it changes the atmosphere at home and in the car. If a child wins a round of something, teach the others to congratulate the winner and the winner to be humble and gracious. Many parents avoid this one, and the disappointment or the success is not handled well.



Children have a way of adjusting to their parents' belief in their ability to be self-controlled and pleasant.

Instead of trying to put up with the fighting, try a new response.

Have a few games you go to when you are stuck in traffic. Stop the car when it is safe to do so. Stay calm. Let the children know you are not going anywhere until they can be pleasant to one another. Do this as often as it is needed. Children do the research and they know just how far they can go. Growling and yelling will not improve the situation long term.



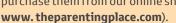
Some trips need a 'leader of the car trip'.

This job can be rotated amongst the children and gives the child with the leadership badge a chance to choose which seat they sit in, the music played in the car, the car game of choice and, if it's a long trip, the place you stop for ice creams. Kids soon learn to be fair and kind, because it's a sibling's turn next time.



Let's get talking and have fun conversations.

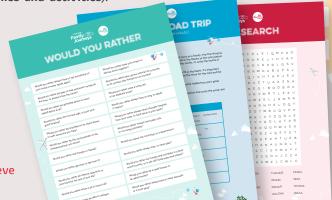
Not only will you get to know your kids better, there will be more chatting and less fighting! For some fantastic conversation starter ideas, get Chatter Box – a series of questions for families, teens and couples produced by The Parenting Place (you can download these cards or purchase them from our online shop at





Have a few games to play when stuck in traffic.

Good-old I Spy is great for children and you can adapt it depending on the ages of your kids – from colours, to shapes, to letters. Car Bingo, word searches and other fun games are good 'go tos' when tackling traffic or on a long road trip (find free printables: www.theparentingplace.com/lifestyle-and-crafts/games-and-activities).







concept-i

FUTURE MOBILITY IN THE MAKING





Imagine if vehicles of the future were friendly, and focussed on you. That's the vision behind Toyota's Concept-i.

Announced earlier this year at the 2017 Consumer Electronics Show in Las Vegas, this revolutionary concept vehicle demonstrates Toyota's view that vehicles of the future should start with the people who use them.

The vehicle was created around the philosophy of 'kinetic warmth' – a belief that mobility technology should be warm, welcoming, and fun. With this in mind, it was developed with a focus on building an engaging driving experience. Concept-i is designed to leverage the power of an advanced artificial intelligence (AI) system that will anticipate drivers' needs, inspire imagination and improve lives.

At the heart of Concept-i is a powerful AI system that learns with the driver to build a meaningful relationship. More than just driving patterns and schedules, the concept is designed to leverage multiple technologies to measure emotion and map it against where and when the driver travels around the world. The idea is that with this combination, Concept-i has the ability to use mobility to improve quality of life.

At the heart of Concept-i is a powerful AI system that learns with the driver to build a meaningful relationship.





The AI system also leverages advanced automated vehicle technologies to help enhance driving safety, combined with visual and sensory stimuli that enhance communication based on driver responsiveness. Meanwhile, under certain conditions users will have the choice of automated or manual driving based on their personal preferences.

Concept-i seamlessly monitors driver attention and road conditions, increasing automated driving support as necessary, or helping to navigate dangerous driving conditions.

The design of Concept-i, was the responsibility of Calty Design Research in Newport Beach, California. They starting with a next-generation user interface serving as a platform for the vehicle's Al agent, nicknamed 'Yui'.

The interface begins with the visual representation of Yui, designed to communicate across cultures to a global audience. With Yui's home centred on the dashboard, Concept-i's interior flows around the driver and passenger sides and throughout the vehicle in sweeping lines, with

interior shapes designed to enhance Yui's ability to use light, sound and even touch to communicate critical information.

Concept-i avoids screens on the central console. Coloured lights in the foot wells indicate whether the vehicle is in automated or manual drive; discreet projectors in the rear deck project views onto the seat pillar to help warn about blind spots, and a next-generation head-up helps keep the driver's eyes and attention on the road.

Designers have also considered the exterior design to enable Concept-i to engage with the world around it. Yui appears on exterior door panels to greet driver and passengers as they approach the vehicle. The rear of the vehicle shows messages to communicate about upcoming turns or warn about potential hazards. The front of the vehicle communicates whether Concept-i is in automated or manual drive.

Concept-i has been described as "exhilarating, delightful and unique - a masterpiece that always looks like it's in motion, even when it's not".

ADVANCES IN SAFETY, POWER AND ECONOMY FOR 2017 HIGHLANDER





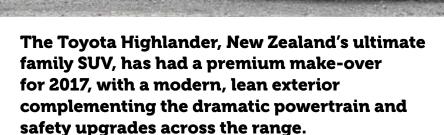
Steering wheel – leather with multi-information display, audio and phone controls with voice recognition, 4.2-inch colour multi-information display and illuminated combination meters



Rear-seat entertainment system including nine-inch LCD display



Two wireless headphone sets



Visually, a new trapezoidal grille with silver accents is flanked by updated halogen headlights and LED daytime running lights. There are fresh 18-inch alloy wheel designs on the GX and GXL (as well as a new power back door with glass hatch for the latter) and 19-inch alloys for the range-topping Limited model. All models gain new LED tail lamps, while the Limited receives additional chrome garnishes at the rear and chrome accents in the front.

Under the bonnet, Highlander is the first Toyota to adopt the advanced 2GR-FKS 3.5-litre, V6 engine, producing significant gains in power and torque – increases of 17kW (to 218kW) and 13Nm (to 350Nm) respectively – over the outgoing model. Paired with the new direct shift eight-speed automatic transmission, the new ratios deliver improved acceleration and overtaking ability.

It's the first Toyota engine to combine VVT-iW with D-4S technology, allowing it to enter the Atkinson cycle under light loads for greater efficiencies, including reduced carbon emissions (down 25g/km) and reduced fuel consumption (by 1.1L/100km).

"Highlander has become established as a firm Kiwi favourite, and the latest improvements deliver more of everything that families and fleet operators want," says Spencer Morris, Toyota New Zealand's General Manager of Customer Services & Product Planning.



Black-leather-accented interior with soft-touch instrument panel, silver ornamentation and wood-grain-style finish throughout



Cargo area – up to 1,872-litre capacity (behind first row). Four cargo hooks, carpeted deck board, moulded resin trim and extendable tonneau cover (shown)

"We've increased performance, improved fuel economy, added safety features and given it a fresh look."

"We've increased performance, improved fuel economy, added safety features and given it a fresh look."

As the superior seven-seater family vehicle in Toyota's SUV line-up, Highlander's extensive safety appointments that have seen it achieve a 5-star ANCAP (Australasian New Car Assessment Program) safety rating across the range, are paramount for around-town driving during the busy working week, just as they are for weekend and holiday adventures. Knowing this, Toyota has applied additional safety technology to the entire Highlander range:

- Emergency stop signal and trailer sway control have been added to all models.
- The Limited gains the Toyota Safety Sense package consisting of a pre-crash safety system with automatic braking, high-speed dynamic radar cruise control, lane departure alert with steering assistance and automatic high beam.
- The Limited also has two front parking sensors to complement the four rear parking sensors (available on all models) and adds a rear cross-traffic alert to the existing blind spot monitor.





Eight-inch audio display with satellite navigation and monitor for reversing camera



60:40 split folding rear seating and four-way front passenger and second row manual adjustment

Inside the 2017 Highlander, the GX and GXL models gain a 4.2-inch colour multi-information display while the GXL receives a larger eight-inch audio display and now features satellite navigation with (where available) SUNA traffic alerts.

The Limited now has a panoramic-view monitor – which provides the driver with a live 360-degree bird's eye view around the vehicle to see potential obstacles from all angles - rain-sensing wipers and a silver wood-grain-style finish throughout.

All vehicles have a sliding second-row seat, while the third row has a 60:40 split to increase luggage capacity, offering both practicality and flexibility for busy families and industry-based utility-lovers.





HAPPY



ANNIVERSARY



Since 1969, 11 generations of New Zealand's favourite car have featured in our lives and our memories. We've learned to drive in them and relied on them to take us on family holidays. We've trusted them to keep the kids safe in the back seat, and we've depended on them to minimise repair bills and maintain their resale value. For so many good reasons, Corolla has long been a member of the Kiwi family.

In 50 years, Corolla has made significant records of various kinds, such as the 'World's Best-Selling Car'. Milestones have been reached and achievements made since the launch of the first Corolla in 1966, with more than 44.1 million Corollas* having been sold globally.

(* The Corolla includes all vehicles named 'Corolla'. Source: TMC, Japan





The first generation arrived in New Zealand in 1966 as a humble 1.1-litre, two-door car with the design concept of "a practical car that could be driven for many years". In 1968 Consolidated Motor Industries gained an additional licence, enabling the model to be assembled in Thames.







It wasn't long after its introduction that this model became the second-best-selling car on the planet. In 1971, in a slightly larger size, the second-generation sedan, wagon and SL coupe provided a more spacious interior, with a 1.6-litre engine and greatly improved driving performance.





The third generation introduced a more stylish design and the body size was increased again to improve collision safety. The cleaner, more efficient Corolla benefited from another modern-day development, the wind tunnel, for testing the vehicle's aerodynamics. The results from this testing heavily influenced its design, helping to create a car that cut through the air more efficiently. A sedan, wagon, van and SR hardtop were all part of the third generation.

COROLLA FUN FACT: 1

One Corolla is sold approximately every 15 seconds worldwide!



With its memorable, straight-lined, rectangular form, the 1979 fourth generation became bigger inside and out. In New Zealand Corollaled its class by outselling the Ford Escort, Honda Civic and Vauxhall Chevette. The Corolla SE and DX Liftback were the sensational newcomers to the Corollarange, and were the cars to be seen in. Space with style, performance with remarkable economy, and superior handling with uncompromising reliability: the new Corolla was a car for the '80s, with the DX introducing the all-new, super-economical 4K series 1,300cc engine.

The big news for Corolla in 1983 came in March when the 10-millionth Corolla was produced, and a new 1.6-litre overhead cam engine that was both smoother and more powerful than the previous 1.8-litre was introduced. It was a hint of what was to come next.









The 1984 fifth-generation Corolla saw a major shift from the rear wheel drive layout to the front wheel drive front drive layout. It was the first to receive local attention, with suspension tuning by Chris Amon and interior improvements made with the assistance of Jan Beck improving features such as ride, handling and interior. The most notable benefit of the change was the significant expansion in interior space. The 'incredible Corolla' television commercial was fronted by John Davidson, the presenter of a popular television show at the time, That's Incredible.

The New Zealand-developed GT Liftback and Hatchback variants were introduced, which included leather seats (this was unique in its class), a locally engineered aerodynamic package and the very sporty 4A-GE engine. Five-speed manual or three-speed automatic transmission was introduced.



Chris Amor



John Davidson, 'Incredible Corolla'



In 1988 the sixth generation was designed to increase the perceived quality of Corolla, and was ahead of its competitors in the New Zealand market at the time.

The rear-drive Corolla coupe and Liftback were replaced with a new front-drive with more refinement and capability than the rear driver it replaced.

Transmission choices were standard five-speed manual and the option of three- or four-speed automatic.

Equipment levels on the sixth generation were a bit spartan by today's standards, with conveniences such as air conditioning, power steering, and stereo being optional.

In June 1990 the 15-millionth Corolla was produced.





GEN 7





In 1992 the seventh-generation Corolla was larger than before and featured an extremely high-quality interior and exterior.

By 1993 Corolla was ready for another generational change, and an upgrade to the engine when the 1,800cc DOHC power plant was introduced.

Global changes up to this point had had little impact on models available to the New Zealand market until 1988, except for another milestone when Corolla in 1997 became the best-selling nameplate in automotive history, overtaking the VW Beetle.

Taking a step back from the seventh generation, the 1998 eighthgeneration returned to the original Corolla concept of a simple, convenient and compact vehicle. This model was the last to receive locally designed suspension and trims, as the closure of the plants in Thames and Christchurch saw manufacturing move to Japan at the end of 1998.

COROLLA FUN FACT: 2

If all 44.1 million units of Corolla were connected in one line, they would go approximately five times around the Earth!

*The length of the current-generation Corolla for Japanese market (4.4 metres) times 44.1 million units. In actuality, the body size of Corolla differs depending on the market and the model.





The Corolla again grew in its eighth iteration, but managed to lose some weight and increase its fuel mileage thanks to a new engine and a generally more efficient drivetrain. This was aided by a new, all-aluminium, 1.8-litre DOHC four-cylinder engine rated at a healthy 120hp – exactly twice the engine rating back in generation one! In 2000 the company added its VVT-i (variable valve timing) system to the 1.8-litre engine, boosting horsepower to an output of 125, at the same time achieving low emissions.



In 2001 the ninth generation saw Corolla being reborn from its traditional conservative image to an image of more modern elegance. It featured a body that reached the maximum limits allowed for a compact car in Japan, and the interior space was also greatly increased by extending the wheelbase.

The 2003 Corolla was an evolutionary development of the all aluminium, 1.8 litro DOHC, 16 yellowed and increased by extending the wheelbase.

The 2003 Corolla was an evolutionary development of the all-aluminium, 1.8-litre DOHC, 16-valve engine from the previous generation and rated at 130hp.

Compared with the wide variety of models available in previous years, this Corolla was more comfortable and roomier than ever and was built to provide years of trouble-free motoring.

'Corolla lost keys'

The new 'Corolla the lost keys' TV commercial was launched.



The 10th generation introduced the Corolla hatch diesel and Corolla Edge in hatch and sedan.

The latest Corolla generation revolutionised what had gone before. The entire range was re-thought and re-engineered - not a task to be taken lightly when you're talking about the world's best-selling vehicle.

You've never looked better

COROLLA FUN FACT: 3

TOYOTA

Since Toyota's founding around 80 years ago, over 230 million vehicles have been sold, that's one out of five holding the Corolla nameplate!

COROLLA FUN FACT: 4

50 years have passed since the first-generation Corolla was exported to Australia in 1966. Currently, the Corolla is sold in over 150 countries and regions.





In 2013 Toyota reached a huge milestone: the 40-millionth Corolla rolled off the production line!

In 2016 the Corolla hatch hybrid was introduced to New Zealand. The world's all-time best-selling car and the world's best-selling hybrid technology were combined. Take a fresh look at Corolla you'll thoroughly appreciate the evolution of New Zealand's most loved car.



Kiwi start-up company, Halter, has a long-term vision of fenceless farming. It's developing

technology in the form of a GPS-enabled, solar-power collar for dairy cows using stimuli, such

as sound, to guide dairy cows to varying areas of farmland. The company is the brainchild of

two young engineering graduates, Craig Piggott (22) and Max Olson (23).

Long-term, the concept of fenceless farming has the ability to change completely how dairy farms operate – similar to the sustainable impact and efficiencies brought about by the invention of the milking machine.

The pair presented at the ICE Angels showcase in September last year, where 12 companies delivered seven- to eight-minute pitches to an audience

of 500. The outcome for them was favourable. They took out the audience favourite award, which included the use of a brand-new Lexus RX for a week, and their new venture gained

great interest from investors.

The nature of their company, being part of the agriculture sector, saw the Lexus General Manager tee them up with a brand-new Hilux to complete their roadie instead of the proposed Lexus RX. From there, the pair took to the roads on a seven-day road trip, driving a figure eight of the North Island – undertaking impromptu visits to local dairy farmers and completing the ultimate situational analysis for their vision to determine how they can assist in shaping dairy farming in the future.

Craig and Max met in their second year of study at the University of Auckland where both were part of an extra-curricular engineering group called Formula-SAE – a team that builds a new race car each year. Max was the chief engineer, leading around 40 other engineering "WHEN YOU ARE TURNING UP UNANNOUNCED AT FARMS, THERE IS NO BETTER VEHICLE TO GIVE YOU CREDIBILITY THAN HILUX. IT WAS A PERFECT ICEBREAKER, TALKING POINT, WHATEVER YOU WANT TO CALL IT. FARMERS TRUST THE HILUX BRAND AND THE BIGGEST ISSUE WAS TRYING TO KEEP THEM OUT OF THE UTE."





students, and Craig was the lead powertrain engineer. Combine these engineering skills with Craig's farming background and a curiosity about how farming could be done more efficiently and Halter was born.

"Max's domain is everything technical with the collar, machine learning etc... he has an unbelievable work ethic and seems to be able to solve just about any engineering problem," says Craig.

"I'm the guy who grew up on a farm, had the idea and convinced Max to join me. I do a lot of the external communications with investors and farmers, but primarily lead the field testing programme. This is because I tend to have experience of dealing with animals and understanding their behaviour".

In a tough farming environment with low payments and poor weather conditions dampening farmers' spirits, the tour for

the young entrepreneurs was hard on a personal level, but well received in terms of their innovation.

"A lot of the farmers have been pushing for this to be in the market (which is encouraging), but at the moment we are continuing to push through our testing and development schedule and have not promised any launch dates."

On the tour the pair drove the Hilux and used it as their sleeping quarters for the seven days – swimming in local rivers to freshen themselves.

In terms of offering advice to other start-ups they say, "Back yourselves and dream big. It's going to be hard work anyway so you might as well have a big lofty goal".

For more information on Halter, visit www.halter.co.nz



MILLIGAN FOR RACING TEAM utes Christchurch drivers Ryan Yardley and Jack Milligan have handed

Christchurch drivers Ryan Yardley and Jack Milligan have handed CareVets team owner Keith Houston the perfect championship result. Yardley, in his second year with the team after winning the rookie title last season, took two outright wins, eight second places and four thirds in the six-round, 18-race series. The teammates dominated the latter part of the championship, but were never able to draw clear of their rivals for the outright and rookie titles until the final round at Hampton Downs.

"Coming into that final weekend I was clear: we race for the championship, not for individual race wins. There was too much at stake. When I qualified on the front row for race one there was a little temptation to go out and race for a win, but the title is important to me and to the CareVets team, who have supported Jack and me all the way," says Yardley.

CareVets Scholarship driver
Milligan won the rookie title with
a race spare and helped Yardley in
his unstoppable run to the 2016-17
Toyota 86 Championship. A wing-man
but never less than a racer, Milligan put
in a determined drive to fend off all
comers in the run to the rookie title.

Albany's Reid Harker pushed Yardley all the way to the final round, but was unable to erode Yardley's points advantage. Third overall was Michael Scott ahead of Jack Milligan, with Jacob Smith fifth.

In total, 20 drivers raced in the Toyota 86 Championship for a share of the \$100,000 prize purse.

Ryan Yardley is now contesting the Australian Toyota 86 Racing Series with Brian Hilton Motorsport, driving the car raced last year by Drew Ridge, who finished 13th in the series. Ridge was one of two Australians who also contested the



'COMING INTO THAT FINAL WEEKEND I WAS CLEAR: WE RACE FOR THE CHAMPIONSHIP, NOT FOR INDIVIDUAL RACE WINS.' RYAN YARDLEY

MILLIGAN PUT IN A DETERMINED DRIVE TO FEND OFF ALL COMERS IN THE RUN TO THE ROOKIE TITLE.

Jack Milligan

opening round of the New Zealand championship in November 2016.

Part of Yardley's prize – in addition to the share of the prize fund – was an opportunity to race overseas.
Toyota 86 Championship Category Manager Geoff Short says that securing a drive in the Australian championship was the logical pathway.

TWO ON THE REBOUND

In a championship where all 20 cars are produced to a single specification, racing is always close and exciting. For two drivers, the opening round at Pukekohe was more than just a test of racing passion.

Jacob Smith of Glendowie almost saw his championship season brought to a premature end at that first round. First, at Pukekohe he went off at the 'esses' and slammed backwards into the tyre wall. Then he was clipped by another car that "came out of nowhere" turning into the tight second-gear Railway Corner, a crash that put him out for the weekend.

With a comprehensively bent-up car, Smith was wondering if he would be able to continue in the championship.

He reckoned without the dedication of his supporters, in particular Tony Richards and the wider team at the Tony

IN A CHAMPIONSHIP WHERE ALL 20 CARS ARE PRODUCED TO A SINGLE SPECIFICATION, RACING IS ALWAYS CLOSE AND EXCITING.



CHAMPIONSHIP

FINAL STANDINGS:

RYAN YARDLEY	1112
REID HARKER	1059
MICHAEL SCOTT	991
JACK MILLIGAN	865
JACOB SMITH	718
BRODY MCCONKEY	712
CONNOR ADAM	634
JOHN PENNY	605
MILES COCKRAM	600
JADEN RANSLEY	582

MATT LOCKWOOD	463
TOM STOKES	383
MIKE LIGHTFOOT	298
ASH BLEWETT	217
DREW RIDGE	202
BEN MACDONALD	169
WILL BROWN	158
TOM ALEXANDER	150
ANDY KNIGHT	141
MARTIN SHORT	82





Richards Toyota dealership at Paeroa, without whom he may well have been unable to continue. Tony persuaded their panelbeater to pitch in and an "enormous" effort went into the rebuild, getting Smith back on track for the next round – just a day before the race weekend began.

"It was an amazing job; I didn't think we'd be back and it shows how much passion there is in the Toyota family and the wider motorsport community," Smith said afterward.

Meanwhile, Michael Scott of Te Puke found himself in an even worse situation in his Northland Toyota/Te Ara car after the final race of that weekend. On a charge through the field he made contact with Matt Lockwood's car on the run-up to the 'mountain'. The two cars touched bumpers at 140 kilometres per hour and Scott was propelled onto the grass and through the gravel trap, the car rolling over as it went.

Pitched up and over the tall safety fences on the far side of the gravel trap, Scott found himself dropped



THE TWO CARS TOUCHED BUMPERS AT 140 KM/H AND SCOTT WAS PROPELLED ONTO THE GRASS AND THROUGH THE GRAVEL TRAP, THE CAR ROLLING OVER AS IT WENT.

upside-down into the pit lane.

"We looked at the car and thought maybe we could repair it, but it was a huge amount of damage."

When the car was taken back to Toyota Racing New Zealand for assessment, the verdict was that it could not be repaired in time. Toyota Racing New Zealand, together with category manager Geoff Short, helped to broker a deal that saw Scott pick up the ex-Callum Quin race car that finished second in last year's championship.

Scott found himself towing the new car to the next round, supported from that point on by International Motorsport, which was also running Connor Adam in the championship.

"I was pretty sore after the roll and I really didn't see me being at the following round. I was really humbled by the support from other racers and race fans after the event—and of course Toyota Racing New Zealand as championship organisers - they were just fantastic."





CONTINGENT IN THE CASTROL TOYOTA RACING SERIES (TRS) HAVE USED THEIR SUMMER RACING EXPERIENCE TO SPRINGBOARD THEMSELVES

INTO INTERNATIONAL MOTOR RACING. BY MARK BAKER

Marcus Armstrong, Taylor Cockerton and Brendon Leitch all have very different racing years ahead of them.

Fourth overall in this year's TRS championship with the M2 Competition team, Marcus Armstrong won at Ruapuna, Hampton Downs and Taupō. He is now contesting two Formula 4 (F4) national series in Europe with Prema Powerteam, racing in both the Italian and German F4s.

The Ferrari Driver Academy inductee has a busy year ahead of him. With the five-round, 15-race TRS behind him, Armstrong is now in the midst of a Northern Hemisphere season of 14 weekends that sees him racing on some of Europe's most famous circuits. The two F4 championships run on separate weekends through the northern spring and summer.

"From the outset this has been our plan – to race the most competitive championships with the best teams possible. Emerging from five weekends of solid racing in the TRS and now going into 14 race weekends plus other work with Prema and the Ferrari Driver Academy means I'm focused on racing 24/7. That's fantastic!"

F4 is part of the governing body's new pathway structure. The cars are less powerful and have less aerodynamic grip than the FT50 race cars used in the TRS, but are lighter and with reduced frontal area they have similar top speeds, meaning Kiwi drivers are well versed in the capabilities of the cars when they exit the TRS.



Armstrong says the cars are easier to drive, although the championships are intensely competitive.

Taylor Cockerton, meanwhile, is commuting to Southeast Asia to race with the PRT team in the five-round Formula China Masters single-seater series.

The series started at the Sepang Formula One circuit in Malaysia then goes to the Zhuhai International Circuit in China for the third and fourth rounds, with the finale at the Shanghai International Circuit in September.

"The biggest challenge will be getting used to the different circuits. Here in New Zealand the tracks are tight and quick with little run-off. Sepang is a modern circuit, wide and with plenty of run-off, and the Chinese circuits are similar," Cockerton says.

The Formula Masters car is similar to the FT50 TRS car previously driven by Cockerton.

"It has a similar chassis, built by the same manufacturer Tatuus in Italy. It's powered by a 2.0-litre engine generating 141kW (about 190bhp) compared with over 160kW (215bhp) from the Toyota. It has similar dual shock suspension on the front and rear and we will be racing on a similar tyre compound."

Still studying at the University of Waikato, 19-year-old Cockerton was seventh overall in the TRS this year – racing with MTEC Motorsport in his second season in the championship. He follows a well beaten path for TRS graduates into the Asian racing scene. Graduates who have preceded him include James Munro, who won the series in 2014.

"I'm going in there with a lot of confidence, with the experience gained in two successful seasons in a very competitive TRS championship. I want to win races and the championship, but we will take every race as it comes, making step-by-step progress."

Competing with Victory Motor Racing, Invercargill's Brendon Leitch (21) had a punishing TRS season of highs and lows. He took a podium at Teretonga and won at Taupō, but was dragged into other drivers' crashes twice, finishing ninth overall. He was the final Kiwi driver to get his 2017 racing plans sorted and will contest the six-round United States F4 Championship.

Auckland-based Deborah Day, who has been a long-time supporter of Leitch, launched a Brendon Leitch Supporters Club in March to pull together the money he needed to line up in the series.

In the US, Leitch will be supported by New Zealander Garry Orton, director of Nelson-based Victory Motor Racing, who ran all four of Leitch's TRS campaigns.

An uncompromisingly quick driver in the TRS, Leitch says he would love to follow in the footsteps of fellow New Zealand driver Scott Dixon in the US – the F4 Championship is viewed as an ideal stepping stone.

The 2017 TRS championship is the first to propel all of its Kiwi entries directly into top overseas drives.



THOMAS RANDLE

OUR FIRST AUSTRALIAN CHAMPION

It wasn't settled until the New Zealand Grand Prix at Manfeild in February, but Thomas Randle emerged a deserving champion in this year's Castrol Toyota Racing Series (TRS).

Building on strong early performances, Randle proved the value of consistency.

Right up to the start of the final race of the championship, the 2017 New Zealand Grand Prix front-runners Pedro Piquet – son of multiple Formula One champion Nelson Piquet – and Red Bull's young Dutch protégé Richard Verschoor (16) posed real threats to Randle's title hopes.

The 2017 championship was the toughest yet, Randle winning at the opening round (Ruapuna) and at the series midpoint, Hampton Downs, taking seven podiums in all and setting seven fastest laps.

He says the win at Hampton Downs – netting him the coveted New Zealand Motor Cup – was an emotional victory and marked the point at which he "first caught sight" of the title and began to think he could win the five-round, 15-race championship.

His favourite drive of the championship, though, came in the second race at the final round, where he fought his way through the field to fourth overall after slipping to 12th at the first turn.

"That was just fantastic.
Totally memorable."

Randle (21) has raced the TRS before, doing the whole series in 2015 and the Grand Prix in 2016.

"Iloved racing there in 2015 and was keen to go back and have a crack at the title. I picked a massively competitive year to do it! This was a very hard fought championship; there was no time when I thought I could relax."

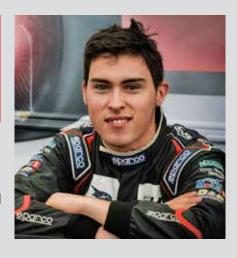
Melbourne born and raised, Randle is a versatile driver, comfortable in single-seaters, touring cars, classics and now the fast and agile LMP3 endurance cars. Like most single-seater racers he began his career in karting, culminating in 2012 when he won the Junior Clubman class of the Australian National Sprint Kart Championship and the Rotax Junior class of the Australian Rotax Nationals.

The following year he stepped up to junior categories in full-sized single-seaters and has not looked back. In 2014 he won the Australian Formula Ford championship; then in 2015 he was runner-up in the new Australian Formula Four championship and ran with the ETEC team in the TRS.

In 2016 he switched teams and raced the final (Grand Prix) round of the series as a one-off with Nelson-based Victory Motor Racing, finishing fifth in the Grand Prix and amassing 93 points across three races.

He returned this year – again with Victory – to win the title.

Randle credits the TRS with giving him the race-craft to win and the tactical nous to know the value of



"I loved racing here in 2015 and was keen to come back and have a crack at the title. I picked a massively competitive year to do it!"

consistency. The championship also helped to propel him into his new challenge – an LMP3 drive.

The Aussie hopes to follow in the footsteps of Kiwis like 2015 WEC champion Brendon Hartley, Le Mans winner Earl Bamber and GT category racer Richie Stanaway, all drivers who have raced in the TRS and forged careers in endurance racing.

"I think that these days endurance racing is the way to go. It's hard to get competitive drives in the top single-seater categories, but endurance racing is growing in profile all over the world. I would love to do the 24 Hours of Le Mans. But it will all depend on how we go this year."

In its most fiercely contested year, Thomas Randle has proved that consistency – and self-belief – are key to taking out the TRS title.



NICK CASSIDY SETTLES INTO HIS BUSIEST YEAR

Champion race driver Nick Cassidy has started his 2017 racing year in ideal form, with victory at the first round of Japan's SUPER GT Championship.

Driving their, new for 2017, TOM'S Lexus LC 500, Cassidy and co-driver Ryo Hirakawa dominated the opening round despite flat-spotting a front tyre under heavy braking.

Cassidy (22) won the TRS in 2012 and 2013 and won the New Zealand Grand Prix in 2012, 2013 and 2014. He won the All-Japan Formula Three Championship the following year and then spent 2016 commuting between Europe and Japan, racing for respected singleseater Prema Powerteam in the FIA Formula 3 European Championship and for Lexus Team TOM'S in his maiden Super GT year. Although international recognition has come slowly and been hard won, he is widely acknowledged as one of the most exciting talents in motor racing.

This year Cassidy faces a busy 15 weekends of racing between April and November, competing for the TOM'S team in Super GT and for Toyota-supported KONDO Racing Team in the spectacular Super Formula open-wheeler category. The Super Formula cars have higher cornering speeds than the 2016 Formula One cars.

"It's a massive challenge and a big jump from Formula Three," says Cassidy, who finished fourth in the FIA Formula 3 European Championship last year.

The opportunity to be based in Japan and contest two premier race series in a single year could be seen as a reward for Cassidy's years of loyalty to Toyota and Lexus in motor racing. He credits the TRS with setting him on the path to becoming a full-time driver.

"In my TRS campaigns I built up so many valuable links with overseas drivers, team managers and engineers. As soon as you do one race in Europe you see faces you know: 'I've just done this, have you got anything available? Can I drive here, can I drive there?'



"I'd be happy to stay here for the next 15 years. It's fantastic racing, very exciting, and the teams I race with are great, totally professional"

This is how my career has been built: a race here, a race there."

While most motorsport drivers are in a hurry to go places, Cassidy is content to park up in Japan after an encouraging debut season in the GT series.

"I'd be happy to stay here for the next 15 years. It's fantastic racing, very exciting, and the teams I race with are great, totally professional," he says.

"I couldn't ask for anything more at this stage of my career."

THE NEXT STEPS FOR THE 'CLASS OF 2017'. WHERE TO NOW?

After 13 sensational years, the best young drivers in the world still chase drives in Toyota Racing Series. Talent spotters and elite driver programmes continue to direct their new stars to TRS.

This year Thomas Randle arrived bearing the crest of the British Racing Drivers' Club and the logo of its Rising Stars programme.

Kiwi Marcus Armstrong was confirmed as a Ferrari Driver Academy inductee just before the 2017 championship started. India's Jehan Daruvala came for a second run at the title with the support of Force India F1 and Richard Verschoor carried the colours of Red Bull on his car as a member of the F1 team's junior driver programme.

The championship filled its grid with 20 young drivers, some chasing the title, some pursuing experience in modern single-seater race cars and some making the transition from karting. Once more, the Kiwi drivers showed they were well able to race alongside the internationals. All 20 have confirmed they continue on into racing series in the UK, Europe and the USA this year.

DRIVERS ARE IN THE ORDER IN WHICH THEY FINISHED THE 2017 CASTROL TOYOTA RACING SERIES

Thomas Randle (Australia)

British Le Mans Cup

Pedro Piquet (Brazil)
European Formula 3 Championship

Richard Verschoor (Netherlands)
Formula Renault Euro Cup

Marcus Armstrong (NZ)
Formula 4 in Germany and Italy

Jehan Daravula (India) European Formula 3 Championship

Enaam Ahmed (UK) European Formula 3 Championship

Taylor Cockerton (NZ)
Formula Masters China

Ferdinand Habsburg (Austria) European Formula 3 Championship

<mark>Brendon Leitch (NZ</mark>) Formula 4 USA

Kami Laliberte (Canada) Formula 4 Italy **Luis Leeds (Australia)** Formula Renault Euro Cup

Shelby Blackstock (USA *Indy Lights*

Keyvan Andres (USA) Pro-Mazda

Christian Hahn (Brazil) Formula 3 Euroformula Open Championship

Harry Hayek (Australia British Formula 3

Ameya Vaidyanathan (UK) British Formula 3

Thomas Neubauer (France Formula Renault Euro Cup

Nikita Lastochkin (Russia) Pro-Mazda

<mark>Jean BaptisteSimmenauer (France)</mark> Formula Renault Euro Cup

Kory Enders (USA) Pro Mazda





Integrated rear door handles, streamlined A-pillars and a sharply angled rear, present a distinctly new styling direction from Toyota, further extending its already broad market appeal.

The trendy C-HR sits on 18-inch alloy wheels, which create the perception that the car is on the move, even when it's stationary.

"It will appeal to early-adopters and buyers who want an edge over the status quo – something maybe a little more exciting that tempts them outside their comfort zone," says Spencer Morris, Toyota New Zealand's General Manager Customer Services & Product Planning.



With a limited supply from the factory and high worldwide demand, Toyota New Zealand has gone for a single high-specification model, available in both front-wheel drive (FWD) and all-wheel drive (AWD).

"Every market in the world has strong customer demand for this car," says Steve Prangnell, Toyota New Zealand's General Manager of Sales.

"It looks dramatic and delivers a stunning drive; it's an eye-catching car on the road and even when parked, plus its compact size makes it an inspired choice for urban lifestyle use."

Five hundred potential buyers had already registered for a test drive prior to the launch, says Steve.

Introducing a state-of-the-art powertrain, C-HR is powered by a new 1.2-litre, turbo-charged petrol engine with its peak torque of 185Nm developed from 1,500 to 4,000rpm for instant throttle response. C-HR achieves a maximum power of 85kW at 5,200-5,600rpm.

Spencer says buyers should not be fooled by the 1.2-litre turbo engine, which offers the best of both worlds – economy and performance.

"The C-HR engine is 'torquey' and flexible, yet quiet and smooth. It's a fun car that's enjoyable to drive," he says.

Both the FWD and AWD models come with a Constant Variable Transmission (CVT) that has a sequential shift mode providing seven simulated manual gears, allowing control similar to a traditional transmission.

"THE C-HR ENGINE IS 'TORQUEY' AND FLEXIBLE, YET QUIET AND SMOOTH. IT'S A FUN CAR THAT'S ENJOYABLE TO DRIVE."

The AWD system can direct anywhere between 0 and 50 per cent of the engine's torque to the rear wheels. C-HR also features eco, normal and sport drive modes that vary throttle sensitivity, steering weight and CVT performance.

Toyota's new global architecture chassis provides a lower centre of gravity for better weight distribution. This, paired with advanced suspension to limit body roll and body movement (typical of traditional crossovers), results in a more driver-oriented vehicle and an enhanced driving experience.

Spencer says that C-HR drives like a dynamic hatchback, but with all of the SUV properties that drivers covet. "This model offers ease of handling through the most challenging of corners, and an agile, fluid response that is both linear and consistent. With electric power steering, C-HR offers precise response and fun-to-drive dynamics combined with its superior SUV visibility," he says.







There are large-diameter stabilisers front and rear, and the trailing wishbone rear suspension combined with rigid steel ball joints contributes to a crisp driving experience.

C-HR comes equipped with the Toyota Safety Sense package, which features a full suite of driver-assistance and active safety features including all-speed dynamic radar cruise control, a pre-crash safety system with autonomous emergency braking, lane departure alert with steering assist and sway warning functions and automatic high-beam headlights. Additional safety features include a blind spot monitor with rear cross-traffic alert, seven airbags, reversing camera and front and rear parking sensors.

As a result, C-HR boasts a 2017, five-star safety rating from the Australasian New Car Assessment Program (ANCAP).

Attention to detail sees C-HR's interior offer a premium feel that is equally eye catching, a fitting accompaniment to the standout exterior design.

"C-HR has a commanding driving position, with the main

instruments and controls angled towards the driver to provide a cockpit-like feel without affecting their visibility," says Spencer.

A leather-trimmed steering wheel with gloss black ornamentation, an Optitron instrument cluster that complements a 4.2-inch colour multi-information display, gloss black and gunmetal grey dashboard ornamentation, a chrome and leather-trimmed shift lever and chrome door handles, soft-touch arm rests in the front, and a black headlining with diamond motif all contribute to a modern, high-quality setting.

A 6.1-inch touch screen audio display includes satellite navigation with SUNA traffic updates. The leather-trimmed steering wheel has audio, phone, information display and safety system controls. Ultramodern 'Cool blue' back lighting is used for all instruments and controls.

The luggage area can be extended with the 60:40 split folding rear seats.







New Zealand, Aotearoa – the team race boat – was christened in mid-February, and since then Emirates Team New Zealand has been feverishly training on the water to improve the crew work and the boat speed.

A fast boat requires close collaboration between the sailors, designers and shore team, as each modification is the result of tests on the water, simulations and constant research of performing solutions. In the past month and a half the team has worked tirelessly both on the water and in the shed to fine-tune the control systems that will be the key variable in the next America's Cup.

The sailing conditions in Auckland have been ideal for testing and putting the race boat throughout the range of conditions in which it will race once in Bermuda.

"The conditions have almost been more 'Bermuda-like' than in Bermuda," says skipper Glenn Ashby.

"We have probably had the chance to sail more days with our America's Cup Class catamaran than anyone to date, as the weather at this time of year in Auckland is perfect for sailing.

"But we have needed every moment we could manage out there, because while we are in transit the other teams will be making some big gains."

From helmsman Peter Burling's perspective: "Every day we have learnt new things, and the more the time has gone by the more we have realised how many opportunities we still have for improvement, exploring and testing.

"The feedback that the sailors give during a training session regarding their feelings on board is crucial. If this is true for all boats, it is even more important in full-foiling catamarans where each parameter is taken to the extreme. We are very satisfied with the job we've done so far, but the time has come to put a line in the sand in New Zealand, so now the final lap begins!"

The conclusion of the testing period is yet another major milestone for the team, who have become used to constant pressure to catch up with the other, more resourced teams that have been actively testing and developing for far longer.

"This was a late campaign for Emirates Team New Zealand, and if we look back at one year ago I still find it hard to believe how far we have come," adds CEO Grant Dalton. "...The time has come to put a line in the sand in New Zealand and so now the final lap begins!"

- Helmsman, Peter Burling

"We have been watched very closely by the Oracle SoftBank spies every minute we have been on the water, and their vigilance makes me think we have built a very good racing machine. We could keep improving and developing the boat indefinitely, but we have got to go racing at some stage, and now is that time.

"It is hard to express the huge effort that everyone on the team has put in to the endless quest for speed and performance gains," concludes Grant.

Although it seems a good time for a short break, the reality is that there will be no slowing down until the last race of the campaign. At the time of writing this article, the team was already pulling the boat apart and packing the remainder of the required spares, equipment and infrastructure to load on to the Emirates cargo plane which was due to leave in just over one week.

The Louis Vuitton America's Cup Qualifiers begin on 27 May at 8am New Zealand time, and Emirates Team New Zealand's first race will be against Groupama Team France.



CAMPBELL STEWART IS A YOUNG ATHLETE WITH DREAMS, ASPIRATIONS AND DETERMINATION BACKING HIM AND HIS CYCLING PROWESS.

Recently granted the prestigious Emerging Talent Award at the Halberg Awards, joining the likes of past winners Jacko Gill, Lydia Ko and Eliza McCartney, 18-year-old Campbell is a sportsman with a bright future in cycling. In fact he has won four junior world titles in the past two years, the most by any New Zealand cyclist in history.

At a local level in his home town Palmerston North, he has won two Manawatu Secondary Schools Sports Awards, supreme sportsman of the year titles and two Manawatu Sports Awards junior sportsman of the year titles, recently adding Palmerston North Marist sportsperson of the year to his list of accolades.

Campbell travels between his home base in Palmerston North and a flat in Cambridge so he can be close to and train at Cambridge's Avantidrome.

His passion for the sport was ignited during his intermediate school years (around 12 years old) at Palmerston North Intermediate Normal School and was somewhat influenced by his sister Kate and father John, who were both accomplished in the sport at the time.

He then progressed to Palmerston North Boys' High School where its strong cycling culture nurtured his passion for the sport some more. His breakthrough occurred at the 2012 Age Group Track Cycling National Championships, where he won four gold medals in the under-15 category.

In his first year of cycling he competed in the nationals in Invercargill, gaining his first national title – and he's been accumulating national titles every year since. He's also made a few overseas trips to compete.

In 2013 Campbell won a haul of three golds and a silver medal. In 2014 Campbell advanced to the under-19 age group, despite being only 16. At the Pan-Pacific Championships in Adelaide he won gold medals in the omnium and scratch races. In the omnium Campbell won in five out of the six disciplines. In 2015 he became a double world champion after a

courageous victory in the omnium at the UCI Junior Track Cycling World Championships in Astana, Kazakhstan. He won the world title in the scratch race on the opening day, and recovered from a crash in the final points race to claim his second rainbow jersey in the gruelling six-discipline omnium.

Campbell joined Sarah Ulmer (1994 in Quito) and the team pursuit world champion (at the time) Regan Gough (2014 in Korea) as double rainbow jersey winners at the Junior Track Cycling World Championships, one behind the three gold medals won by sprinter Sam Webster in Moscow in 2009.

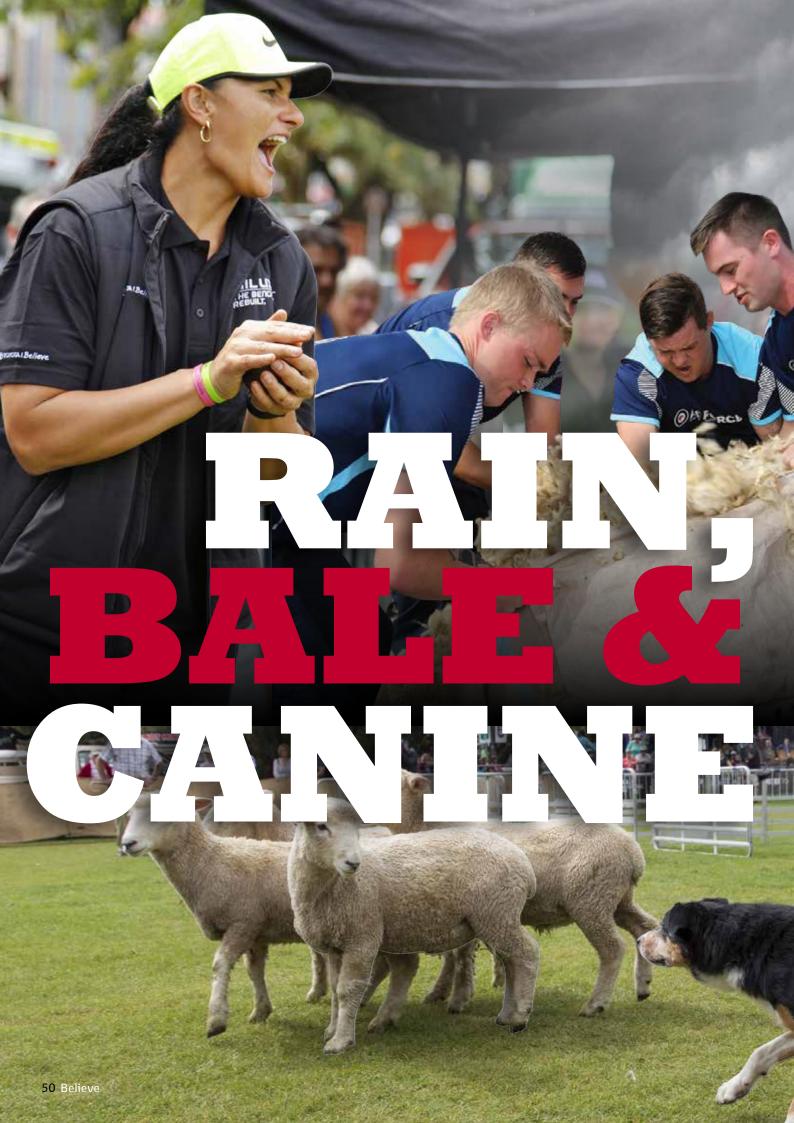
Mike McRedmond – life member of the Palmerston North Marist Cycling Club and 1982 Commonwealth Games silver medallist - is Campbell's coach. Mike was National Junior track head coach between 2006 and 2010 and has coached numerous Palmerston North athletes, including Olympic medalists Jesse Sergent and Simon van Velthooven. Campbell says Mike's impact has been massive since his early days in the sport. He also attributes his success to the support of his parents, and the structure of the sport – Cycling New Zealand.

"After winning world titles and seeing my success in the sport, I've kept being hungry for more."

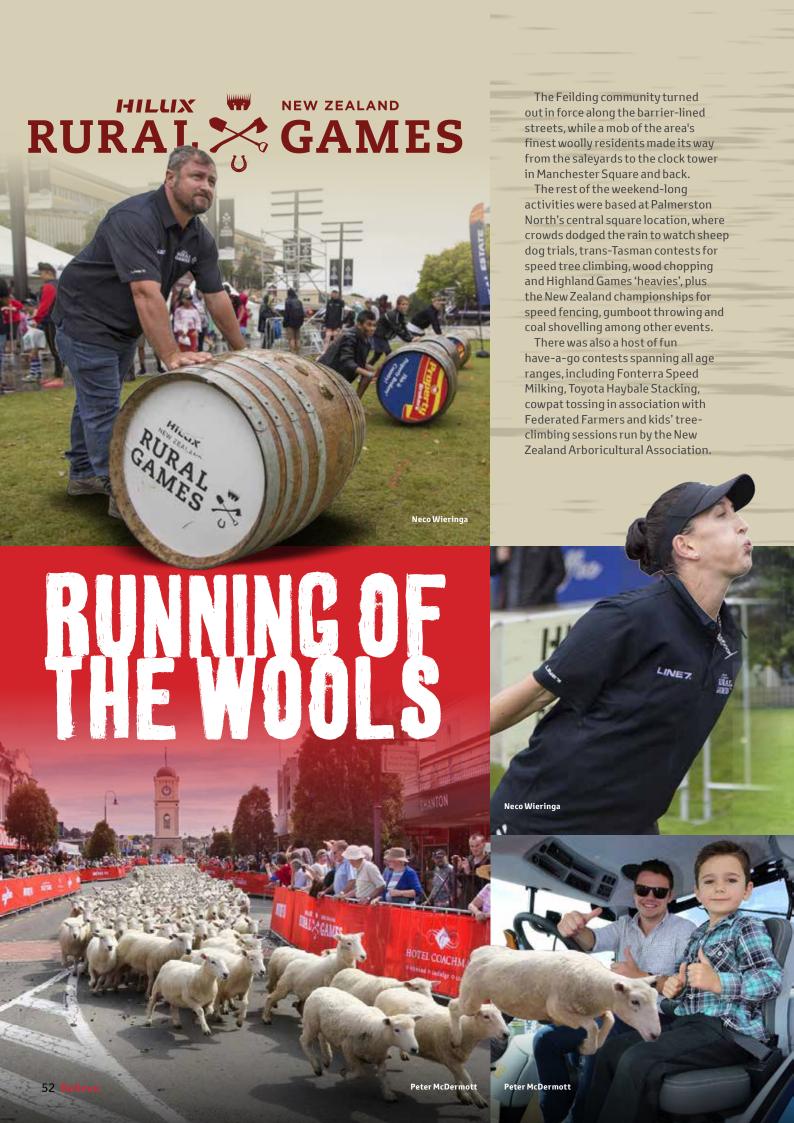
It became clear to Campbell that track cycling was the area within the sport where he wanted to hone his skills. Last year he achieved two world titles in Switzerland in the junior men's team pursuit, also achieving an under-19 world record, first in the junior men's omnium and a second in the junior men's madison events.

Now Campbell is competing within the elite ranks and has already competed this year in two world cups, in Los Angeles and Columbia, achieving silver in omnium and bronze in madison teams.

He says that competition at this level is a real step up and is tough. "There are a lot of good racers out there," he says. The wheels on Campbell's bike don't stop spinning. At the time of this interview, he was working towards being named in the New Zealand team to compete in the track world champs in mid-April, in Hong Kong. It was later announced that he had made the 16-strong Vantage New Zealand Elite Track Cycling team, joining the Rio Olympic riders, who form the nucleus of the team, as one of three new additions. Campbell was part of the six-strong men's endurance squad named to compete at the Hong Kong Velodrome with the New $Zeal and \, team \, finishing \, with \, a \, record, \,$ training leading up to the event with training camps and his usual nine training sessions each week – be it gym work, track training or road riding. He is keen to give it all he can to prepare for competition. And for the longer term, he has his sights set on next year's Commonwealth Games on the Gold Coast, then the Olympics in Tokyo in 2020. Campbell has partnered with Manawatu Toyota, which has assisted him with four reliable wheels, a new RAV4, for his regular commute between Palmerston North and Cambridge. "The support I've received from Manawatu Toyota has been amazing because it has allowed me to travel to racing and training with less "AFTER WINNING A FEW WORLD TITLES AND SEEING MY SUCCESS IN THE SPORT, I'VE **KEPT BEING HUNGRY FOR MORE."** 49







"Everyone stepped up this year to take the games to a whole new level - sponsors, patrons, rural sports associations, event crew and of course our wonderful volunteers who worked tirelessly through all weathers to deliver an amazing games. See you on The Square next year!"

Games founder and trustee Steve Hollander

Among the highlights were Olympic champions, Dame Valerie Adams (as a Toyota Ambassador) and Mahé Drysdale. The double gold medallists swapped shot puts and rowing oars for Red Bands as they competed as wild card entries in the New Zealand Gumboot Throwing Championship, in association with Skellerup. Dame Valerie added New Zealand gumboot champion to her accolades, as she beat the current titleholder and was only a few centimetres short of a New Zealand women's gumboot-throwing record. Through Dame Valerie's throwing success, she became eligible to compete in the world gumbootthrowing champs in Estonia.

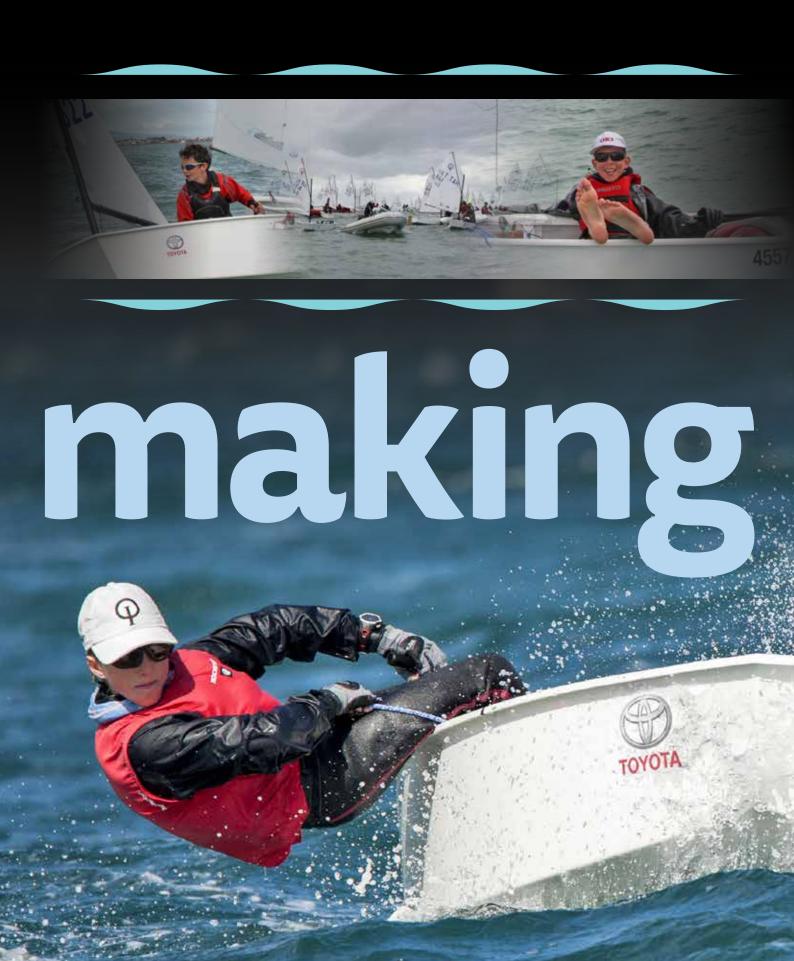
She also mixed with spectators and took part in the cowpat-tossing contest. Games founder and trustee Steve Hollander says the move to Manawatū this year paid off in spades,

with the event attracting around 16,000 visitors during the weekend.

"Our first two years in Queenstown were fantastic, but the welcome we received in the agri heartland of New Zealand was phenomenal. I feel as though the games have found their spiritual home," he says.

"I'd like to thank everyone who turned up to watch and have a go, from Olympians Dame Valerie Adams and Mahé Drysdale to the rural sports stars of the future who had a blast at our Kids 'n Country contests".





The New Zealand International Optimist Dinghy Association Nationals is an annual regatta that attracted young Sailors from Australia, Tahiti and New Caledonia, as well as sailors from all over New Zealand to Napier's Sailing Club in the Hawke's Bay over Easter. This year's winning sailor, Auckland's Seb Menzies at just 12 years old took out the winner's silverware.

"It's a pretty good feeling. It's been a long time coming and I've worked hard for it," Menzies said after being announced the winner at the prizegiving for the five-day Toyota Optimist National Championships hosted by the Napier Sailing Club.

With four years of competition under his belt, it was Menzies fourth nationals and his third in the open fleet. His previous best finishes at this level were a 47th and eighth and he was the fourth best Kiwi when he finished eighth.

Just two of the three scheduled races were completed on the final day, due to a false start and a lack of wind forcing the cancellation of the final race.

With six wins, a second and a sixth, hot favourite Menzies won the title by 12 points from Canterbury's David Buchanan from the Charteris Bay Yacht Club.

Aussie Blake Wilson, from the Southport Yacht Club, was a further four points back in third place and Napier Sailing Club's Josh Gilmore was fourth overall and the third best Kiwi, 18 points behind Menzies.

Menzies said "I can do another two years in the optimist class but that was my last regatta. I'm now keen to move up to a new class such as a 29er."

He collected two trophies at the prizegiving. One was for his first place overall and the other for his role in the Murrays Bays club's No 1 team's victory in the teams segment of the regatta on Sunday.

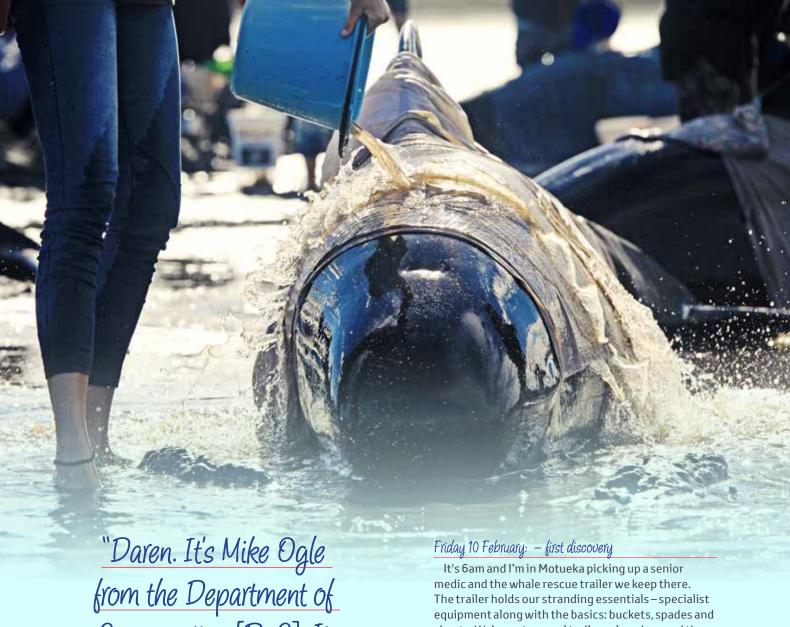
Menzies and clubmates Greta Pilkington, James Barnett, Thomas and Mason Mulachy finished ahead of the Australian national team and Tauranga One in the battle for the team's prize.

Toyota New Zealand has had a long involvement with yachting New Zealand from the grassroots level and Optimist Nationals through to the highest level of the sport with our support of Emirates Team New Zealand in the America's Cup since 1992.

PROJECT JONAH: Diary of a stranding

IT ALL STARTS IN A PUB. IN FACT, IT STARTS ON THE WALK HOME FROM A PUB AT AROUND 9:30PM ON A THURSDAY NIGHT. 9 FEBRUARY 2017, TO BE EXACT.





Conservation [DoC]. It looks like we've got around 180 whales stranding at Farewell Spit."

My heart leaps. These are the words I hope never to hear but spend my life preparing for. Why? Because, as the General Manager of Project Jonah, my job is to work with DoC, our trained medics and members of the public to help whales survive a stranding. 180 is a lot of whales. And they are stranded at one of the most remote places in New Zealand.

I get on the phone to our senior medics. I'm really lucky to have a team of experienced volunteers who will drop everything to go to a stranding. In a few hours, hundreds of people and a whole lot of whales are going to be relying on that experience.

We alert our trained volunteer marine mammal medics in the region, putting them on standby to respond. Our training is essentially 'whale first aid' and human health and safety, and with more than 3,500 trained volunteers throughout New Zealand, there are usually medics close to any event.

sheets. We've got several trailers placed around the country, but strandings at Farewell Spit are common occurrences, so we keep one permanently at Motueka.

7:30am:

We arrive at Triangle Flat, the entry to Farewell Spit, where the base of operations will be. I'm relieved to see a team of several DoC rangers already there and about 20 members of the public. DoC advises that there are 418 long-finned pilot whales stranded on the beach. 200 are estimated to be dead and they are about four kilometres up the beach. Those are staggering numbers. This could be one of the largest strandings in New Zealand's history. Certainly the biggest I've been involved in. at this point I am focusing on two things:

1. FIGURING OUT THE TIDES SO WE KNOW WHEN A RE-FLOAT IS POSSIBLE

2. BRIEFING VOLUNTEERS SO THEY **CAN START HELPING**

Our response to a mass stranding (any stranding involving more than three whales) is dictated by the tide cycle. At Farewell Spit whales typically come in on a rising tide and strand close to the high tide line as the tide recedes.

And the tides go out a long way here: up to seven kilometres in some places. There is no returning them to the sea until the next high tide, when they've regained buoyancy and can swim off. I learn that high tide is at 10:30am.

It's information that I share in my first briefing to the 20 volunteers already there. I'm sticking to the essentials so we can get them out to the whales as quickly as possible. It's the distilled wisdom of 40 years of Project Jonah experience:

'Today you'll be doing whale first aid. Remember the three Cs – keep them Cool, Comfortable and Calm.

Coo(: These whales have black skin and a thick layer of blubber. By pouring water over them, you wick the excess heat away from them. We can also put light coloured sheets over the whales and pour water over these to help with cooling and don't pour water down the blowhole."

Comfortable: Once we've got enough people, you'll be working in a team to get the whales upright. We want them on their bellies so their blow holes are above the water when the tide comes in, to reduce the chances of drowning, stress or exhaustion.

Ca(m: The whales have the best chance of surviving if they stay calm. That means you need to be calm. Keep your voice down and pour water over them gently.

You can't look after the whales if you don't look after yourselves. So keep safe. STAY AWAY FROM THE TAIL! It's one of the biggest muscles in the animal kingdom and can knock you over easily, injuring or even killing you. Wear sunblock, put on your wetsuit and take food and water."

Over the course of the day, I give this briefing to around 700 people.

9:50am: First reports that the incoming tide is deep enough for some of the smaller whales in the pod to swim.

10:30am: Four of our senior medics arrive from Auckland.

They head straight out to the whales to lead the re-float. They all have experience in using a pontoon (a trampoline-like mat suspended between two inflatable outriggers). This equipment was designed in the 1980s to re-float single whales, and we've had a lot of success placing a dominant or magnet whale into a pontoon and taking it out to deeper water to encourage the rest of the pod to follow. However, today there isn't enough time or water depth to do this.

12:15pm: The pod is re-stranding.

1:30pm: The pod has stranded in the same spot as before.

While we expect a re-stranding at Farewell Spit, it's still demoralising for us and the volunteers.

But it is precisely at this moment that we see humans at their best, their most compassionate and their fiercest in their commitment to help.

Although not the biggest whales, long-finned pilot whales can grow up to six metres long and weigh more than three tonnes. They dwarf us with their size. But when they are on the beach it is obvious that they are wild animals out of their natural element, and it is evident that they are sentient and aware of us.

Plenty of people have asked why we re-float them, why we don't just leave them to die on the beach. It's "Darwinism", it's "survival of the fittest", it's them "evolving to be land based again". We've heard it all, and it's clear that none of these people has ever been to a stranding, as anyone with an ounce of empathy simply couldn't leave them.

This is why hundreds of volunteers spend the next seven hours providing first aid to the whales: doing the heavy work of getting the whales upright, digging holes to gather water from, and pouring bucket after bucket of water over them. It's why they give their whales names and spend time talking to them and building bonds with them.

And it's also this that makes leaving the beach at the end of the day so hard for people. We can't work around the whales at night because it's too dangerous in such a remote location. There are many hazards, not least being the whales' tails, a swiftly incoming tide, stingrays and sharks and the difficulty of working in the dark.

"PLENTY OF PEOPLE HAVE ASKED WHY WE REFLOAT THEM, WHY DON'T WE JUST LEAVE THEM TO DIE ON THE BEACH?

WE'VE HEARD IT ALL, AND IT'S CLEAR NONE
OF THESE PEOPLE HAVE EVER BEEN TO A
STRANDING, AS ANYONE WITH AN OUNCE OF



7.30pm:

As the tide starts to return and evening draws in, we start clearing the beach. We remove the equipment and then the people, most of whom leave reluctantly. Have we done enough? Will they re-float themselves and swim off? These are questions that only the morning can answer.

As we leave the beach we pass the bodies of the dead whales. Each has a sprig of kawakawa on their pectoral fin. A kuia from Te Ātiawa, the local iwi, has said a karakia for every single whale. It feels important and a fitting way to farewell them.

Saturday 11th: - going the distance

5:30am: It's an early start.

There has been a low tide overnight so we need to be back at Farewell Spit ready to hear from DoC whether more whales have stranded.

6:45am: DoC confirms there are 120 whales stranded in roughly the same place as yesterday.

6:50am: I brief around 30 Project Jonah marine mammal medics, of whom some have travelled overnight to get here.

7:00am: I brief a really large crowd of the public. High tide is 11.30am.

While the briefing covers many of the same points as yesterday, we have to ensure that the safety messages are repeated. Never assume that these people know what to do; that's when accidents happen. But one thing is different from yesterday – stingrays and sharks are in the shallows. They are being attracted to the dead whales on the beach.

9:30am: The tide is high enough for us to start the refloat

Once the whales are buoyant we bring them all together to a central point. That's easier said than done. The whales are socialising and heading in all sorts of directions. The volunteers are working hard to keep them from heading back in towards shore.

11:30am: All of the whales are swimming and the volunteers form a human chain, holding hands parallel to the shore.

The whales' echolocation identifies the human chain as an obstacle, so that they don't re-strand. By midday there are more than 150 people in the human chain, making it at least a kilometre long. It's quite a sight.

We get news from spotter boats out in the bay that there is a pod of another 200-300 whales heading directly towards us. This is totally unexpected and we're concerned that if they come in too close they'll also strand. We immediately send out the remaining volunteers in wetsuits to join the human chain.

There's a terrifying moment when we see a wall of whales bearing down on us. Plenty of people genuinely wonder if they'll stop or keep swimming straight into us.

They do stop. And there's a sublime moment when they gather up the newly re-floated whales and swim out to deeper water. We are absolutely elated. Many people have been in the human chain, in deep water, for hours. As they watch the whales swim away they know it was worth it.

DoC monitors the pod from boats in the bay. The news continues to be promising, but we won't know until the tide starts going out.



5:00pm: We get news that a pod of about 80 whales has stranded right off Triangle Flat where we are based.

We send a group of volunteers to respond. This is quickly followed by the news that there is a group stranded five kilometres further along the coast at Pūponga. A group of volunteers drives around the coast to respond to them.

Within an hour 240 whales have stranded. It's horrific. Our saving grace is that they have stranded at very near low tide, so won't be out of the water for long.

6:00pm: The tide starts coming in.

With such a large number, it's been difficult to get them all upright in time.

7:00pm: Everyone not in a wetsuit is asked to leave the water.

They may subsequently feel relieved about that, as we start spotting stingrays swimming amongst the whales.

8:00pm: We start to withdraw all volunteers from the water.

It's a long walk back to the beach. Some whales are already free-swimming. Will we see them tomorrow? It has been a brutal day, filled with moments of elation, horror and sadness. Can we do it all again tomorrow if we need to?

Sunday 12th: — the end in sight

6am. As we drive to Triangle Flat we pass a handful of whales on the beach near the side of the road. It doesn't bode well.

7:00am: DoC confirms that there are no new whales stranded on Farewell Spit.

We work with them to ensure that the area to the east around the coast is also clear. We're relieved that only the handful we saw, 17 whales, have been found stranded. We brief a small number of volunteers with wetsuits and cars to respond.

We ask the rest of the volunteers to stay at the stranding site if they can. Many do. We provide briefings every hour or so, even if they are to tell the volunteers there is no new news. One of our medics offers to teach anyone who is interested a 'waiata tō tautoko', the 'karakia for the dead whales'. This is a song to amplify the prayer for the dead. She composes it there and then, writes it on a sheet, and within 15 minutes has around 50 people singing and harmonising to it.

Another group of volunteers has pooled all their money so they can buy and cook warm food for volunteers. They didn't have wetsuits and wanted to be useful. It's an extraordinary and simple act of generosity.

5:00pm: We are finally able to call the stranding over.

I will stick around for another day, in case they do re-strand. But as the volunteers leave and we pack up our gear, I reflect on how a stranding brings out the best in people. It is a privilege to be part of this extraordinary event.

Project Jonah is a small charity that employs just two people and is funded by donations. If you've been moved by our story and would like to support us, please go to our website at:

www.projectjonah.org.nz

TOYOTA HYBRIDS PASS 10 VILLON GLOBAL SALES

THE TOYOTA MOTOR CORPORATION (TMC) EXPECTS SALES
OF ITS HYBRID TECHNOLOGY TO GAIN PACE FOLLOWING THE
ANNOUNCEMENT THAT IT HAS SOLD MORE THAN 10 MILLION OF
THESE FUEL-SAVING VEHICLES AROUND THE WORLD.

Following the significant milestone, TMC's target is to increase global sales of its hybrid vehicles to 15 million customer deliveries by 2020 – an increase of 50 per cent.

It took more than 15 years to reach a cumulative global tally of five million hybrid sales, but just under four years to double the total. The latest target represents an even greater acceleration.

Last year was the most successful in history for the group's hybrid sales, with 1.4 million vehicles sold by the Toyota and Lexus brands, representing approximately 15 per cent of their sales.

Japan is the biggest market for hybrids with more than 4.8 million sales, followed by North America (3.2 million) and Europe (1.3 million).

The world's best-selling hybrid vehicle is the Prius, with almost four million cars sold since it was launched in Japan in late 1997. Prius arrived in New Zealand in 2003.

New Zealanders have bought more than 9,600 Toyota and Lexus hybrids since their introduction to the local market – 7,409 from the Toyota brand and more than 2,200 from the Lexus brand. The top sellers are the Camry hybrid (2,795) and Prius (2,598). Globally, Toyota estimates that its hybrid vehicles have saved approximately 29 billion litres* of fuel and 70 billion kilograms* of CO₂ emissions when compared with conventional petrol cars of similar size and driving performance.

TMC Chairman and the 'father' of Prius, Takeshi Uchiyamada committed the company to continue working with customers to tackle global environmental issues.

"When we launched Prius, no one even knew what a hybrid was; those who drove it were called geeks or other names," Mr Uchiyamada says.



"Today, thanks to those early-adopters who gave Prius a chance, hybrids have grown in popularity and have ridden a wave of success out of the unknown and into the mainstream," he says.

TMC says the first-generation Prius represented Toyota's response to the resource- and environment-related issues of the 21st century. It proved so popular with customers that it became a byword for an 'environmentally friendly vehicle'.

The fourth-generation Prius – launched in 2016 as the first vehicle built on the Toyota New Global Architecture platform – also incorporated engaging dynamics for customers wanting to purchase cars that are fun to drive.

TMC says the sale of the 10-millionth hybrid demonstrates the staying power of technology that is a mainstream solution for reducing greenhouse gas emissions and other pollutants.

The global company says it will continue to expand its range of fuel-saving vehicles – and it welcomes the introduction of hybrid vehicles by competitors.

"Now that customers around the world are opting to purchase hybrid and other fuel-efficient vehicles, the entire automobile industry has been able to contribute to the solution of global environmental problems," TMC says.

Toyota has positioned hybrid technologies as core environmental

technologies for the 21st century.

In October 2015 TMC announced the Toyota Environmental Challenge 2050, which aims to help reduce the negative impacts of automobiles on the global environment to as close to zero as possible, and to contribute to the creation of a sustainable society.

'Hybrid' encompasses all of the component technologies necessary for the development of environmentally friendly vehicles, from battery-electric to fuel-cell hydrogen vehicles.

^{*} Toyota calculation based on the number of registered vehicles × distance travelled × fuel efficiency (actual fuel efficiency in each country) × CO_2 conversion factor.

STOYOTA Ebbett Toyota TOYOTA

Earlier this year, the Toyota dealership changed its name to Ebbett Toyota. The dealership had been part of the Ebbett Group of companies acquired by northern districts Toyota, including Engel Toyota and Terry Booth Toyota, which merged and became the Waikato Toyota that Hamilton knows today.

Ebbett Toyota opened its purpose-built new premises in Morrinsville last year and plans are currently progressing to have a new facility at The Base shopping centre, Te Rapa open at the end of March 2018.

The new dealership will incorporate innovative design elements to maximise its site, with the added advantage of more carparks.

(Te Rapa is a mixed light-industrial, large-scale retail and semi-rural suburb

to the northwest of central Hamilton. It was built on a flat area that had previously been the bed of an ancient river, the forerunner to the present Waikato River.)

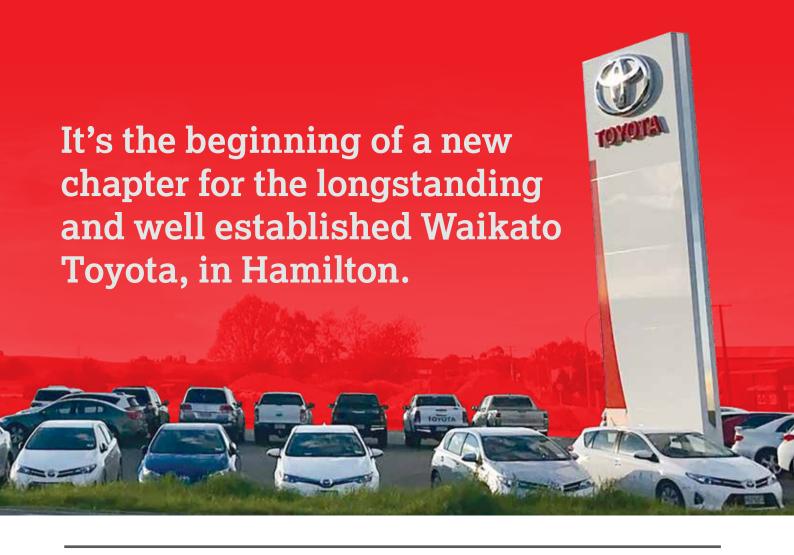
CEO James Harvey has been in the motor industry for 25 years and took over the helm at Ebbett Toyota in 2015. "The current dealership site has served the Hamilton/Waikato community for a number of years, but it is time to make a move to accommodate more

customer parking and deliver a better experience to our customers.

"The current site in Hamilton's CBD sits on 5,500 square metres, which will grow significant, with the new site occupying 11,000 square metres. Currently we have around 70 service customers through the workshop each day, and enough parking space for only 28.

"The current plans have parking for around 110 carparks, which will





innovations planned in the new build are to create a more sustainable site, which will recycle and reuse water and house new plug-in hybrid charging stations.

alleviate the stress of finding a park, and ultimately deliver a better experience for our customers.

"It will be a shift in mindset for our customers, who have become used to the location we have been in since the Waikato Toyota/ Terry Booth Toyota days."

James admits that this will be a big shift for city-based customers who have become used to dropping their vehicles off for servicing and walking to their workplaces. Ebbett Toyota currently provide a courtesy vehicle service and will continue this at its new location in Te Rapa.

Some of the innovations planned in the new build are to create a more sustainable site, which will recycle and reuse water and house new plug-in hybrid charging stations.

Also incorporated into the design

of the building is a more efficient use of natural light and space, and new state-of-the-art lighting design with LED lighting.

James admits that the current building has become dated and is due for the upcoming transformation. At the time of print the foundations were expected to be laid, with progress expected to ramp up in the coming weeks.



Stuff Stuff

BLUSH FAUX FUR CIRCLE RUG/THROW

This season is all about the sheepskin. The versatile throw/rug in its unique round shape ticks all the boxes. Whether thrown over your bed, on top of your favourite chair or under your favorite piece of furniture. All this comfy goodness is sure to chic up your Winter in style.

COMPOSITION: Faux Fur Front - 80% Acrylic & 20% Polyester, Velour

Backing - 100% Polyester

SIZE: 110cm in diameter RRP: NZ \$199.00 incl GST

AVAILABLE: www.perchhomewares.co.nz

GOAT FUR RUG OMBRE

Goat skin rug. Perfect as a floor rug or a throw over a chair or couch. Front is made of 100% Goat Fur. Backing is made of 100% Faux Suede (polyester)

SIZE: 60cm (W) x 90cm (L) (This size is approximately as each hide will be slightly different in shade and size)

RRP: NZ \$219.00 incl GST

AVAILABLE: www.perchhomewares.co.nz

KAREN WALKER EYEWEAR

Karen Walker's 'The Transformers collection' marks the first time the designer has put herself in front of the camera to helm the campaign. She was photographed in Hollywood at iconic Smashbox Studios by Michael Schwartz working with Karen Walker Creative Director Mikhail Gherman, makeup artist Valery Gherman and stylist Dennis Gots. There are nine bold frames in the new range including oversized squares, imposing shields and overblown '50s cat-eyes. The season's colour options are fromz solid shades of dusty pink and khaki and a new split contrast acetate, to lens and metal details in stellar new crystal colours, rainbow mirrors and amber tones.

RRP: from \$349

AVAILABLE:

www.karenwalker.com

Bepure Super Boost C

Research has been found that Vitamin C is the most important nutrient for supporting the body's immune system against bacteria and viruses.

Unlike other Vitamin C products, BePure Super Boost C has a two to one ratio of bioflavonoids to Vitamin C. What does this mean? Once the Vitamin Cis in your body, the bioflavonoids recycle the vitamin C electron, essentially providing you with double the Vitamin C in one go.

Vitamin C is used throughout the body in multiple ways. From increasing your immunity, to improving you collagen for reducing aches and pains and improving the quality of your skin, hair and nails. It's also incredibly important for hormone synthesis and optimal hormone function.

BePure Super Boost Cis designed to work alongside the BePure Everyday Health Pack, BePure Zinc Restore and BePure Adrenal Regenerator under times of increased stress to the body and immune system

RRP: \$48.00 (single purchase) or \$44.00 (autoship)



Bepure Everyday Health Pack

The pack includes two month's supply of BePure One, the ultimate everyday multivitamin, and BePure Three, a high strength, sustainably caught fish oil.

BePure One is the result of more than two years of development and provides you with a comprehensive range of nutrients we aren't getting from our food. BePure One contains extra vitamins, minerals and antioxidants; making it the ultimate, all-in-one, daily multivitamin to support the stress of modern living while promoting optimal health.

BePure Three is a high strength, sustainably sourced fish oil, packed with omega 3 essential fatty acids. Omega 3's keep our cell membranes flexible to allow good nutrients into the cell and toxins to be released. Also has high anti-inflammatory properties, loaded with Vitamins A and Vitamin D.

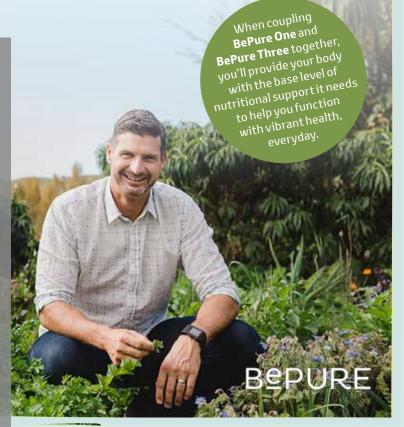
RRP: \$139.00 (autoship)

AVAILABLE: www.bepure.co.nz

BEN WARREN'S QUICK TIPS FOR WINTER WELLNESS

Ben Warren is a leading clinical nutritionist and holistic health expert and is the Clinical Director and Founder of BePure

- Find and apply helpful tools to manage your stress levels.
- Eat more warm nurturing foods like steamed vegetables or chicken and bone broths.
- Go to bed before 10pm and try to get 8 hours of uninterrupted sleep.
- Ensure you're getting enough essential nutrients by eating a clean, wholefoods diet and taking nutritional support daily.
- Up your Vitamin C! Vitamin C is an antioxidant that works hard to protect our bodies from damage and invaders like viruses and bacteria.



Young artists drive big solutions with Toyota Dream Car contest

66 Believe

Every year, one of the largest global art contests for children, the Toyota Dream Car Art Contest, invites children from more than 80 countries to share ideas about the future of mobility by drawing their dream cars.

Hundreds of New Zealand children submitted entries in the 11th global competition from November 2016 to February 2017, with successful artworks announced in April.

The top three placing artworks from each age category – under 8 years, 8-11 years and 12-15 years – are submitted to the Japan-based World Contest, with the global winners announced in June.

One winner from New Zealand will be invited to Japan to attend the Dream Car Art Contest award ceremony in August.

AGE CATEGORY: UNDER 8 YEARS



At the World Contest, a panel of judges will allocate Gold, Silver, Bronze and Best Finalist awards for each age category across all finalists.

Winners Kavin Kumar, Toni Wilson and Sophie Irvine placed first in the three age categories and will take home Apple iPad minis. New Zealand National Contest winners won certificates from Toyota New Zealand and Toyota gift packs to acknowledge their achievements.

Kavin Kumar and Toni Wilson have both won previously in their respective age categories.

Artworks were judged based on criteria made up of three key components: the message, the uniqueness and the art characteristics. Judges of the Toyota Dream Car Art Contest were seeking dream car concepts that were clearly understood, expressed from a unique viewpoint and demonstrated artistic

AGE CATEGORY: 8-11 YEARS

elements such as colour, structure and technique.

The entries were judged by the Toyota New Zealand management team and Te Manawa Museum CEO, Andy Lowe.

Toyota New Zealand's General Manager of Marketing, Andrew Davis, says that this year's competition generated hundreds of entries, illustrating an increased sustainability focus among young children.

"It is quite remarkable to see such creativity in their artwork and just how important protecting and improving their environment is," says Andrew.

"The calibre of entries shows that when you give children the forum to dream and shape our future, they all have a common goal of making the world a better place through means of mobility, and they get to have a lot of fun doing it."

AGE CATEGORY: 12-15 YEARS

More than 800,000 entries were submitted worldwide in the 2016 competition.

2017 Toyota New Zealand Dream Car Art Contest winners:





Gold Winner

Sophie Irvine Palmerston North, Bee-Car Seed Library



Toni Wilson Christchurch, Toyota Pods



Silver Winner

Kelyn Holmes Auckland, The Delta



Silver Winner

Feao Taulangau Kaikohe, Nature Rebirth

Bronze Winner

Josephine Situ Auckland, Toyota Bee Friend



Bronze Winner

Marley Martin Huntly, Marley Bus









The Toyota Kiwi
Guardians programme
launched in March
2016, and has been
operating through
its 60 nationwide
sites helping kiwi kids
connect with nature.

connecting

In its first 12 MONTHS, more than 9,200 KIWI KIDS

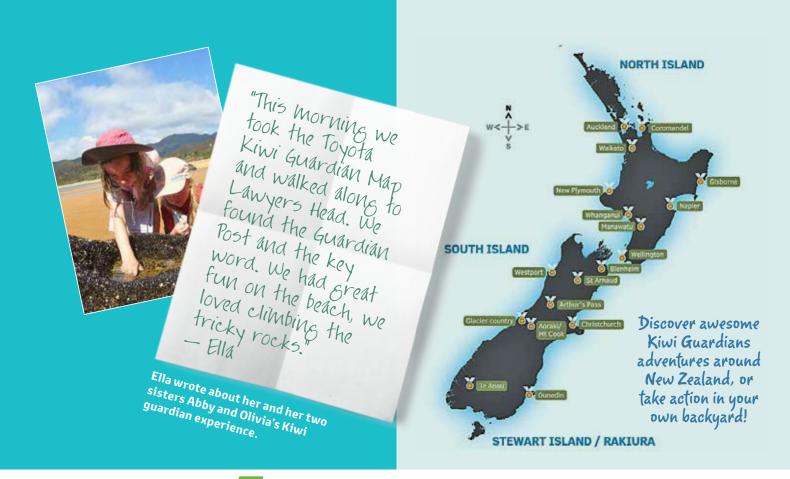
can claim to be Guardians of the land, thanks to the partnership between the Department of Conservation and Toyota New Zealand.



Guardian posts are located in Kiwi Guardian sites from Northern Coromandel, to Te Anau in the south. Kids just need to look out for the specially marked kiwi guardian post when they get there, note the special code word in order to complete the requirements and gain their Kiwi Guardian medals. The programme highlights family-friendly activities at specific sites that support kids to engage their senses, take risks and ultimately earn themselves a medal in the outdoors. It encourages kids to explore their natural surroundings, earn rewards and take action in their communities.

In addition to this, kids can take action and explore in their own backyard. Kids don't have to travel too far from home though to still participate in the programme, as activities like building a weta motel, attracting lizards to their gardens, or becoming a pest detective – are all activities that can easily be done in their own backyard.

Kids can go online and plan their trip or adventure – print a map, and begin their exploration. Activities like identifying tree species, listening for native birds, identifying fungi on decaying wood and fossicking under rocks for water creatures can be all part of the outdoor adventures. General Manager Used Vehicles and Marketing, Andrew Davis says "We are hugely proud of the partnership and have worked closely with DOC over the last year to establish 70 Guardian sites and get awareness of the programme out to Kiwi kids.



with nature

We have been blown away by the medal redemptions and it is hugely satisfying to know that each medal redemption also represents a family that has taken the time to connect and get into nature." Many of the sites are also easily accessible to large urban centres. And from the Toyota Kiwi guardians themselves, they are true testaments to the fun and adventure the younger generation are experiencing.

A kid can earn a medal just by completing an action in their own back yard. Did you know that more than 99 species of Lizards live in New Zealand? As part of the Kiwi Guardian programme kids can get some hints and advice on exploring the cracks and crevasses in their own backyards to look for Lizards – and find a perfect spot to create a lizard lounge. This can earn you a Kiwi Guardian Activity medal. Or if detective work is more your thing, you can use your detective skills to track down pests like rats, stoats and mice – and by doing so you can earn yourself a pest detective medal! There are some helpful hints and tips on building tracking tunnels to attract those pests, listing out household items to collect to construct a tunnel. There's a special online tool on the website which help you identify the presence of pests.

In all, there are 62 adventures and seven action activities that kids can do at home to earn a medal, with limited edition medals from time to time, with more planned throughout 2017 To start learn more about Kiwi Guardians, download your adventure maps or begin your activity – visit kiwiguardians.co.nz and follow us on our facebook page.











Our eight 'Believe' statements

We believe every day's an opportunity to improve.

We're a company whose eyes are always on the road ahead. Working to find ways to be safe. Go faster. Go further on a tank of gas. To help the Earth go further on its limited resources. We strive for continuous improvement in everything we do. It's not a motto. It's not a mission statement we hang on the wall. It's the way we do things. We believe there is no best – only better.

We believe that if you can dream it, you can do it.

We will continue to set ourselves seemingly impossible goals and continue to strive to achieve them.

For example, Prius came from a goal of building a car that would set a new standard in energy use and reuse. Prius c is an innovative, smaller city car that doesn't compromise on interior space or safety. Our latest goal is to build a car that makes the air cleaner as it drives. Of course this sounds impossible, but nonetheless our engineers are aspiring to do just that.

We believe a better tomorrow starts today.

We must always think of the long-term social and environmental consequences of our actions and constantly work towards a better tomorrow. We know that although motor vehicles can transform lives and communities for the better, they can also have a detrimental effect on natural resources, carbon emissions and quality of life. And mere concern is not enough; we have to take responsibility and do lots of small and not-so small things today, to help make a big difference in the future. This means we need to make our vehicles more environmentally responsible.

So, we must constantly:

- Improve how they are built by making our factories more environmentally friendly.
 We've begun to do this by introducing paint booths to the Thames Vehicle Operations centre. We are also exploring how we can convert our Thames refurbishment processes to use water-borne paints.
- Improve the materials they are made from. By taking care to use the minimum amount of materials, and choosing more easily recyclable materials, we'll help to avoid the unnecessary depletion of the Earth's scarce natural resources.
- Improve the way our vehicles are sold and serviced. Toyota New Zealand and Authorised Toyota Dealers have a strong commitment to environmental certification standards (Enviro-Mark) and work within a programme of continuous improvement.
- Lessen the impacts of the use of our vehicles. We aim to ensure the lowest possible running costs, fuel consumption and emission footprint.

Toyota products and services will represent the finest in quality and value, to improve life for our customers, while respecting the Earth's limited resources.

Our efforts will be guided by two principles: continuous improvement and respect for people. This simply means that we honour our customers as welcome guests and serve them in the manner they desire. We respect the time and priorities of our customers and colleagues. We practise the belief that 'there is no best, only better'. Together, we will bring this commitment to life at every opportunity, for every customer.









We believe in respecting others.

We listen to our customers, our dealers and New Zealanders to help determine our course. Internally we have many forums for discussion; externally we survey our customers when they purchase new and Signature Class vehicles.

We welcome feedback to Toyota New Zealand's unique Customer Dialogue Centre. We also endeavour to honour each other and our customers by acting with courtesy and integrity in all our dealings. We respect the time and priorities of others by being efficient and communicating as clearly and simply as possible; treating our customers as guests and serving them in the manner they desire and deserve.

We believe in trying to make a difference.

The core of Toyota's business is making vehicles that help people lead better lives. Whether they need transport to get to work, school or carry out a job, or vehicles that enrich their families' everyday lifestyles, we try to make vehicles that make a difference. It also means we support causes like The Parenting Place that are working towards making New Zealand a better place.

We believe in working together.

The Toyota team satisfies its customers by working together—whether we're designers, engineers, production workers, Toyota New Zealand, Toyota Financial Services, dealer sales teams or service and parts technicians. With the underlying philosophy of respecting others, the entire Toyota team works on a basis of mutual trust and co-operation. For us, Team really does mean Together Everyone Achieves More.

We believe good things stand the test of time.

Every day, we build quality products. We expect a Toyota's life to be measured in decades and hundreds of thousands of kilometres of motoring, because it's in that lifetime of use that our customers experience the real value of a Toyota. In the event that something goes wrong, we stand behind our products with inclusive warranties, country-wide Authorised Toyota Dealers, our dedicated Customer Dialogue Centre and a comprehensive replacement parts' supply operation.

We believe in going the extra mile.

We will go the extra mile to deliver our customers an outstanding level of service. Service that matches our outstanding product quality. Consequently we provide our dealership staff with the technical skills and product knowledge to ensure they can do just that. If something goes wrong, our Customer Dialogue Centre will help resolve the issue.





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