

CATS ARE COOL



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TOP CATS

A SNAPSHOT OF FIVE CRUISERS

TWO HULLS ARE OFTEN BETTER THAN ONE, ESPECIALLY WHEN IT COMES TO COMFORTABLE CRUISING, WRITES CATAMARAN FAN KEVIN GREEN.

When considering a cat, there are plenty of advantages compared with a monohull, along with few disadvantages. High among the attractions are spaciousness and apartment-style living. When off-the-wind, fast passagemaking is a major attraction and in tidal waters you can glide over the shallows or rest on the beach, as many do in the cruising hub at Lizard Island in Queensland. For those not wanting a rag and stick, power cats are frugal yet spacious, so are understandably becoming more popular.

On the downside, windward sailing can be a chore compared with a monohull, where the stability of a deep keel is hard to beat in a blow or when beating in a swell. During storms, the monohull leans over, whereas a sailing catamaran should be reefed well in advance because its rig absorbs the loads. Controlling a catamaran in heavy weather can be tricky because of its inherent size and lack of underwater structure, which also means they don't self-right, unlike monohulls, and in extreme conditions can pitch-pole. However, most cruising cats are designed to be blown sideways rather than capsize, due to their mini keels allowing extreme leeway and buoyant bows minimise the risk of pitch-poling. Finally, mooring costs are a significant downside when it comes to marinas where cats are heavily penalised or may not even be berthed.

PICKING YOUR BREED

Your preferred type of sailing will dictate which catamaran is best. Given that many coastal cruising sailors spend the vast majority of their time at anchor or sailing between sheltered locations, a high volume and heavy displacement boat like the top-selling Lagoons might suit. These are designed as load-carrying boats that can sail and motor in a fairly wide variety of conditions. Or perhaps if you are buying a boat overseas, consider starting your ownership adventure at the yard then sailing away for a long sojourn back to Australia. This allows the yacht's value to depreciate, reducing import tax liability.

For the weekend warrior, who wants to bolt out of Sydney for short coastal hops and go to windward in all conditions, the best choice may be a performance cruising vessel such as the new McConaghy 50 or an Australian-made Schionning, which are lighter displacement and have daggerboards. The apartment-style living of modern cats is also ideal for liveaboards. Comfort and seaworthiness would be high on the priorities for the liveaboard who may find that blunt-nosed cats jog around at anchor compared with the sleeker models often found in Australian designs.

HORIZON PC60

Designed by Lavranos Marine Design of Auckland and built in Taiwan by one of the country's largest yards, the Horizon PC60 is one of the most impressive power cats I've been on board, thanks to its quality and innovative design. The master cabin is placed at the front of the saloon, while behind it is the lounge and galley, adjoined to the aft deck. The interior is customisable, as is much of this classy cruiser (including the flybridge, which can be open or enclosed). Down in the hulls, three cabins can be configured with the forward starboard VIP cabin having a large ensuite and separate shower. The semi-displacement hulls cruise at 18 to 20 knots and the PC60 has an impressive range of 2,760nm in displacement mode.

www.hmya.com.au

www.horizonpowercatamarans.com



MODEL	Horizon PC60 Catamaran
YEAR OF LAUNCH	2013
LENGTH OVERALL	18.51 metres
DRAFT	1.46 metres
BEAM	7.47 metres
DISPLACEMENT	33.7 tonnes
ENGINE	Twin Caterpillar C12 Acert 715hp, shaft drive 4-blade props
SPEED	25 knots (max)
WATER	1,150 litres
FUEL	3,800 litres
BUILDER	Horizon Yachts, Taiwan
NAVAL ARCHITECT	Lavranos Marine Design of Auckland/ Winchester Design, Florida
PRICE	AU\$4,175,000

EXPLORE NEW HORIZONS

The New Zealand-designed features of this motor cat are impressive, with a fresh take on cabin positions and multiple customisable features to truly make it your own.



LAGOON SEVENTY 7

Having built about 4,000 units, Lagoon is the world's major cat maker, so when it flexes its R&D muscles the results are usually interesting. With the arrival of the flagship Seventy 7 sailing yacht and the upcoming Seventy 8 motor cat, the company looks to have surpassed even itself. Offering three to five cabins, a unique "private beach" option on its hull-side, dedicated crew area and various galley options, the Seventy 7 begins a new chapter for designers VPLP, which collaborated with Italian interior specialists Nauta. Living space is maximised via the flybridge, forward cockpit and the owner has a dedicated dual-level living space. The first of these 23-metre hulls has just splashed in Europe, with the motor cat to follow.

www.seventy7.fr

www.seventy8.fr

MODEL	Lagoon Seventy 7
YEAR OF LAUNCH	2016
LENGTH OVERALL	23.28 metres
BEAM	11.00 metres
DISPLACEMENT	57 tonnes
SAIL AREA	337m ²
ENGINE	2 x Volvo D4 177hp (optional 2 x John Deer N5 227hp)
EXTERIOR DESIGN	Patrick Le Quément
INTERIOR DESIGN	Nauta Design
CONSTRUCTION	Composite
NAVAL ARCHITECT	VPLP
PRICE	AU\$4,175,000

ROOM WITH A VIEW

This three-level mammoth motor cat offers an open plan apartment-living feel with all the mod cons, including enormous tender garage and beach club to the aft.



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MOTOR SKILLS

Motor catamarans are a fast growing category for some very good reasons. They offer vast amounts of space and fuel economy, and some are extremely seaworthy. They are available in three main categories: planing, semi-displacement and trawler cats. The trawler concept of displacement – frugal consumption boating – is well illustrated by the upcoming Lagoon Seventy 8 and its smaller sibling the MY40.

Alternatively, the Australian-built Bajaca from Kiwi designer Roger Hill is a semi-displacement boat that offers all the comforts yet with double-digit speeds. Moving up a notch to an earlier Hill design, Voodoo is a pure sports boat that can reach an impressive 40 knots.

Designs vary greatly, so, for instance, the top two builders in the world – Lagoon and Leopard – have power cats that use a variety of hulls. Some have dedicated power hulls while others are simply hulls from the sailing model. The twin engines set wide apart on cats not only aid handling but also have the big advantage of inbuilt redundancy and safety. So, when motor cruising, it's often more efficient to use a single engine or when hard pressed going to windward in a chop, some engine help may be needed on a sailing cat.

PROMINENT CAT FEATURES

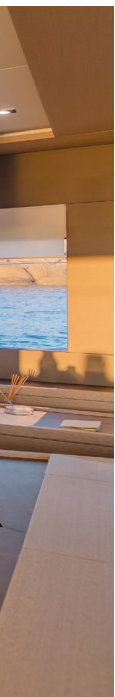
Unlike most monohull sailing yachts, catamarans can have three levels, and on larger vessels such as the new Sunreef Supreme 68, this creates a high vantage point for skippers from which to steer. A flybridge gives the steerer commanding views to make handling these large boats much less imposing. The number of helm stations can also vary, with some smaller sailing models having just one helm while others have two. Sailing purists can even choose twin tillers on the French Outremer, for that direct feel of the rudders.

Helm position and the number of wheels are especially important for handling in close quarters. Handling larger catamarans is made easier by bow thrusters, which deal with the windage that these tall boats generate. Tall hulls are a common feature of the modern cat because they create volume inside and give bridgedeck clearance above the water. Watching a Catana 59 spin around in front of my bows as a Mistral gust caught it one time in France, confirmed to me the need for thrusters on larger cats that lack daggerboards.

Most relaxation happens in the saloon, so it's a key place when choosing a layout that suits your lifestyle. What goes into this living space and what is left out dictates how much room you've got for the lounge benches and room for the entertaining you plan to do. For instance, the new Sunreef Supreme 68 has the galley forward in the saloon, which is unusual but frees up the rear area and aft deck for entertaining.

Traditionally, the choice of putting the galley upstairs or downstairs – the latter found on some Seawinds and new Lagoon Seventy 7s – is a clincher for some buyers. Also, natural light and window angle can be important, according to how much sunlight you like. This is dictated by bulkhead angle, which varies across builders. The upright bulkheads famously used by the boxy Lagoons and Fontaine Pajots contrasting with the more streamlined saloon on the Hill designs, for example. The pros and cons are more internal space in the Lagoon, while the Roger Hill designs sit at anchor better.

Other innovative ideas include a deck-level cabin. This layout is found on the Horizon P60, which has the owner's cabin up top and you can even plan your boat with this Taiwanese builder. Foredeck cockpits are another feature, especially on larger cats, so can be found on the new Lagoon Seventy 7, which really changes the whole dynamic and outlook for relaxing in port.



WATER WORLD

The Sunreef's open plan saloon with fully retracting windows and galley forward is ideal for Australia's tropical climate. Five cabins plus crew quarters are available, with an incredible 300m² of living space across three decks.



SPECIALIST HANDLING

With their two hulls and a wind tunnel running between them, catamarans handle differently to monohulls. For example, falling off the wind is likely as the breeze catches one side or other of the hulls and pushes them. Counteracting this with the twin engines located outboard is the upside of cat design but this can only help so much. Most manufacturers offer a bow thruster to help counteract this on larger cats. Flybridge motor catamarans create even more windage, so can be a real handful in close quarters during a stiff side breeze. If in doubt, I often use the Royal Naval trick of "winding ship" which involves using warps to leverage or even move a vessel that is pinned to the dock by strong wind.

For picking up a mooring, cats require a yoke attached between the hulls and coming alongside, and amidships cleats are essential. At sea the motion of multihulls can be erratic in swell, with a tendency to pulsate rather than roll like a monohull. My most extreme experience of this was on an Orma 60 trimaran, something cruising sailors are unlikely to encounter! For general boat handling, training is worthwhile with catamaran experts such as Keith Logan, who runs Too Up Sailing in Sydney.

"When the windward hull lifts even slightly, get that reef in," Bruce Arms told me once when we were racing offshore during the Three Peaks Race. As a holder of the Solo TransTasman Yacht Race record and round-Australia record, Bruce knows plenty about reefing multihulls.

Another challenge is the infamous "cat slap" of waves reverberating between the hulls but this can be minimised by choosing a boat with plenty bridgedeck clearance. Just don't overload your boat, a sure way to kill the speed advantages of cats. Finally, knowing when to reef a fully-powered-up catamaran is critical.

SUNREEF SUPREME 68 SAILING

This newly launched 68 footer from the Polish yard (under French ownership) has an angular design that maximises volume, offering 300 square metres of customisable living space across three deck levels. Unusual features include the galley location forward on the saloon deck and a large tender garage for water toys. In the hulls are five cabins, which can be tailored to requirements. The first sailing hull was delivered to Singapore recently and the motor cat version is also on the water in Europe.

www.vicsail.com

A NUMBERS GAME

Cats are similar to monohulls in the variables of the equation that constitutes a certain kind of catamaran. These are based on length, sail area, displacement, draft and bridgedeck clearance.

The ratio of displacement to length (D/L) is a good indicator of speed, so voluminous cruisers often have a figure of 100 or more. The sail area to displacement (SA/D) is a power-to-weight ratio that determines the potential speed (and stability) of a cat. Fast boats such as Outremers and carbon-hulled Gunboats will give figures in the high 30s.

Hull shape plays a major part in overall performance, as it reacts in different ways according to the loads. The voluminous Lagoons will carry their loads more effectively than a loaded Gunboat, which is not designed for heavy-duty cruising. Equally, the saloon shape and topsides create windage and contribute to how a yacht sits at anchor or handles under power.

The growing trend of flybridges combined with towering topsides means these vessels can be a challenge to handle in windy conditions or in the marina, where powerful bow thrusters are required. The distance from water to the central nacelle is bridgedeck clearance, and determines stability and performance, with taller hulls reducing the wave slap – the bane of some older cats.

MODEL	Sunreef Supreme 68 S
YEAR OF LAUNCH	2016
LENGTH OVERALL	20.50 metres
DRAFT	1.80 metres
BEAM	10.50 metres
DISPLACEMENT	45 tonnes
ENGINE	2 x 110hp (2 x 225hp option)
SAIL AREA	232m ²
WATER	1,000 litres
FUEL	1,800 litres (4,500 litres option)
DESIGN	Sunreef Yachts
CONSTRUCTION	Composite
PRICE	AU\$3,900,000



BEWITCHING BOATS

Roger Hill's diverse motor cat designs can be sleek and speedy for fun charters (*Voodoo*, pictured above) or perfect for the long-distance family cruise you've been promising yourself (*Bajaca*, right).



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PERFORMANCE CRUISING

Cruising cats are generally built for comfort rather than speed, so the monohull speedboat owner who is transitioning to a cat might look for an optional engine upgrade. Equally, for the monohull racing sailor who is changing down a gear, there still needs to be a reason to take the helm of his sailing cat. So optioning-up with big-headed mainsails, gennakers and Code Os are considerations. Changing the fixed props to folding ones can also make a big difference, especially when motoring under a single engine for fuel economy.

Rigs and their support are key points on catamarans because they rather absorb huge loads. And with no backstays it means the shrouds are heavily loaded, so sturdy inner and outer stays are another consideration, along with large chainplates.

For more power, rotating masts are the ultimate in upwind performance, giving a wing shape to enhance and smooth airflow. But you can only do so much on a traditional cruising catamaran with its mini-keels and small wetted area, so choosing a performance boat with daggerboards in the first place is an option. Australian-made ones include the exciting Schionnings and new McConaghy models. These use lightweight construction to create fast passagemakers that minimise leeway. ○

VOODOO, PACHOUD NZ

This performance coupe motor cat built by Pachoud NZ has a planing speed of 40 knots, so is ideal for the sports-fisher market or similar. *Voodoo*, the 18-metre hull, is already well proven, having completed a trans-Tasman. The living space on *Voodoo* has been designed as one big, open plan area, with the cockpit, galley, saloon and helm all on one level. This Hill design is a similar sleek hull to *Bajaca* (see right) but with chartering in mind, so has four cabins to house up to nine guests with ensembles and king-size beds

www.pachoud.co.nz

MODEL	Roger Hill 18m Power Cat (<i>Voodoo</i>)
YEAR OF LAUNCH	2011
LENGTH OVERALL	18.00 metres
DRAFT	1.00 metres
SPEED	40 knots (max)
BEAM	6.10 metres
DISPLACEMENT	25.0 tonnes
ENGINE	2 x C15 Caterpillar 850hp
WATER	1,000 litres
FUEL	5,800 litres
DESIGNER	Roger Hill Yacht Design
CONSTRUCTION	Epoxy Composite
PRICE	POA

BAJACA, NOOSA MARINE

Australian-built by Noosa Marine, *Bajaca* is a long distance cruising cat (3,000nm range) that is ideal for that Top End trip and beyond. The sleek exterior of this composite power cat minimises windage at anchor, while retaining the flybridge – essential for reef navigation – and inside Kiwi designer Hill created four large cabins. The split-level saloon uses the aft section adjoining the deck to house the galley-diner, while the elevated forward section gives the skipper commanding views when not choosing the flybridge.

www.noosamarine.com.au

MODEL	Roger Hill 19m Power Cat (<i>Bajaca</i>)
YEAR OF LAUNCH	2015
LENGTH OVERALL	19.00 metres
DRAFT	1.20 metres
BEAM	7.00 metres
DISPLACEMENT	30 tonnes
ENGINE	Twin Yanmar 530hp shaft drives, 4-blade Austral props
BUILDER	Noosa Marine
DESIGNER	Roger Hill Yacht Design
CONSTRUCTION	Composite
PRICE	AU\$2,800,000 (ex-GST)