
BLUEWATER
CRUISING ASSOCIATION
Photo Contest Winner
Cecily Grant
Cabbage Island, which is part of the Gulf Islands National Park system, is one of our favorite anchorages. September 1st is a day to savour those last rays of sunshine, and think back to the long summer days spent exploring local waters. My husband Jim and I can always discover some new little nook to investigate, and still we enjoy returning to this beautiful spot.
Currents
July 2021

Table Of Contents

Laying Up

https://currents.bluewatercruising.org/articles/laying-up/

We've had ***Avant*** offshore for a few years now and have developed a routine for laying her up for the off season. It's a fair amount of work, but pays dividends in letting us come back to a vessel that's not suffering from mold or mildew, and hasn't degraded (much) from the weather when we're away. We have set ***Avant*** up to wait for us on the hard and in the water, and each has its unique requirements.

Sailing in Mexico and Central America we have rarely seen rain in the cruising season (October to May) but we know the rainy season (June to September) is a different story. We have never 'enjoyed' a storm aboard, but we know that hurricane season will bring them in our absence. Preparing the boat takes a few days, but the effort pays dividends on our return.

Mold

Mold is perhaps the most pernicious hazard for a laid up boat in the tropics. If it gets a foothold, the warm, moist interior of the boat is the perfect environment for it to grow, and it will grow everywhere, on any surface. To forestall its growth, we clean the interior aggressively and then spray all surfaces with a mixture of straight vinegar mixed with a drop of dish soap per litre/quart (the dish soap is a surfactant and stops the vinegar from beading), wipe them with a cloth wet with the same mixture and allow the vinegar to dry in place. The ph value of vinegar is antithetical to mold growth, and it simply won't start where there is vinegar on the surface. The smell is overwhelming on application, but fades in an hour or so, and is undetectable on our return. We also mist curtains and cushions with the same mixture, spray liberally in the bilge, and leave a few bowls filled with just vinegar (no soap) in various places around the boat to evaporate while we're away. We use at least a couple for gallons for this process.

We prop cushions on their sides/edges just before we go to allow maximum air circulation, and leave all cupboard doors ajar as well. Clothing and bedding is dried in the sun and then plastic bagged before stowing below so it can't get damp.

If we're on shore power, we leave a cheap 110 volt fan below to circulate the air, and if not we leave our Nicro day/night solar vents running. One year in El Salvador we were able to leave an air conditioner running, which was great, and where ***Avant*** is now (Panama) we have a dehumidifier running 24/7 to control the moisture.

If you choose 'electronic remediation' (dehumidifier or air conditioning) for mold control, you need to plan for power outages and recognize that at the dockside or in the yard shore, power will likely be somewhat unreliable and will suffer multiple outages over the season. Fancy new style microprocessor controlled units will usually not restart after a power outage or voltage drop; old style, bog-simple units with mechanical switches usually will restart after an outage (and as a bonus, they're usually cheaper, too). A dehumidifier or stand alone AC will need a drain point, such as a galley or head sink drain, while a window style AC can be set up to drain overboard or through cockpit drains.

Tarps

Tarps are used for a couple of things: to keep sun off the decks and thus control heat, and to keep the rain off portions of the deck. We use them, but under the tarps we do get algae on deck. There are cheap tarps and not so cheap tarps, and the cheap blue type last mere days or at best weeks in the intense sun and can't withstand summer squalls and storms. We buy 'good ones' (usually they're not blue, and sometimes are silver on one or both sides), get them double the size we need, and put them on doubled up. The side exposed to the sun will rot and fail in the UV, but the second layer will usually last out the season. We don't use the grommets on the tarps, but instead gather the fabric of the tarp around a ping pong ball and secure that with a constricting loop knot (a topsail sheet bend tied back on the bight). The grommets are the first point of failure. After a season, the tarps are garbage.

Run the tarps as low as possible so they have the lowest windage and cover the most deck area.

We also have fitted sunshade material awnings that ride low to the decks and are secured to the toe rails and cover the decks. They shade the decks where we don't have tarps, and where they ride over the traps they add UV protection for the tarps. Sunshade material is widely available at Home Depot and other DIY shops, usually in the garden department. It's easy to sew on any machine, and the plastic grommets they sell for it are easy to apply and seem to last well. As with tarps, grommets are the first potential point of failure, but as we have them every foot along the edge, they spread the load well.


View under the sun shade awning as we start to ‘gift wrap’ the rig with aluminum foil.

Bugs

Of course, we live in fear of a bug infestation of some sort while away. We buy cockroach bait (apparently the kind that comes in a tube like toothpaste is best) and roach hotels and place them around the boat. We use the whole tube, as this is not the place for half measures. We have found two dead roaches and no live ones aboard on our return in the 14 years we’ve been laying up. We shudder to think how many we might have found without the poison set out.

Food

The temperatures in the interior of the boat will be extreme: in the Sea of Cortez, interior temperatures of 140°f/60°c are typically reached daily for a boat on the hard for weeks at a time, and 120°f/49°c for a boat in the water. We have had cans of food explode from the heat, and an unopened bottle of ketchup left aboard cooked in the heat to turn the rich dark brown colour of bbq sauce. For unopened food we want to try to keep, we get small plastic bin liner bags and after emptying and dosing the interior of the lockers with their vinegar wipe-down, we double bag the food in small batches and stow back in the lockers. If a can explodes it will do so inside the bag and the mess will be contained to the ½ dozen or so items sharing the bag with it.

Plastic

Items made of plastic do not fare well. The heat and UV bake them. For items below decks, we wet out a cloth with ArmorAll, Aerospace 303 or a similar plastic treatment (easily found at auto stores) and wet wipe them down. For items on deck that can’t be removed and brought below, we treat them with protectant, wrap them in a layer of paper towel, wrap aluminum foil over that (two layers of cheap tin foil

seems to work better than a single layer of thicker expensive stuff) and then secure the tin foil with liberal amounts of duct tape (being very careful the duct tape only adheres to the tin foil and not to anything under it). On our return we find the duct tape has usually been reduced to a skeleton of the reinforcement fabric and is easily removed.

We also wrap winches, blocks and all other deck hardware in a similar fashion. UV will destroy the ball bearings in ball bearing blocks.

Zippers and Snaps

Zippers and snaps like to corrode shut while the boat is laid up. We rub them with cheap dollar store chapstick or lip balm (cheap lip balm is usually a mix of waxes and petroleum oils like Vaseline) to increase the chances they will work when we return.

Elastic

Elastic will no longer be after a season of baking in the heat. Shock cords should not be used to secure anything as they will perish. Elastic in clothing and swimming suits may not be elastic on your return.

Lightning

Grounding. Most vessels are poorly grounded, and their grounding is ineffective when hauled (yes, you can be struck by lightning when on the hard). You can ground your boat quickly and simply with a set of jumper cables (or add these to increase the grounding)

If in the water, we buy a set of cheap but fairly thick jumper cables. Separate into two wires. Remove one clamp from each wire, strip back a couple or six inches of insulation and ‘fray’ the end (or keep the clamp and clamp it to a 1’x1’ metal plate) to make a better ground connection with the water. We attach remaining clamp to a top shroud or other bit of metal that connects to near the masthead and throw the frayed/plated end in the water. One cable on the port side, one cable on the starboard side.

If on the hard, separate cables and attach one to the top shrouds and Jack stands on the port side, the other to the same points on starboard.

In either case, the cables will be trash at the end of the season, as they are not designed for continuous outdoor use. Brushing clamps with wax, Vaseline or any other topical protectant helps them rust less and look better longer. Even if you *think* your boat might be/is well grounded, these jumper cable tricks will ensure/increase the protection.

We gather up all portable and easily de-mounted electronics (hand held VHF and GPS units, epirbs, led flashlights, portable radios, etc.) and wrap them in paper towel, then in tin foil, then in plastic food wrap (secured with masking tape), and then place them in the oven as a kind of double faraday cage. We disconnect all antennas and easily unplugged items like chartplotters, AIS, VHF, etc. and leave them disconnected and just hanging to disrupt possible paths for lightning.

Batteries

Small batteries (AA, AAA, C, D, 9V, silver cells like A76, CR2025 and CR2032, etc.) are removed from whatever they are powering, gathered, inventoried and given away. They won't be any good when we come back, and we need to know how many and of what type we will need to bring when we return.

The ships batteries (house and starting) we leave connected to our solar array for charging while we're away, to make sure power is available to our bilge pumps. We disconnect (switch off at the panel) the shore side charger as superfluous.

Bilge Pumps

We inspect and test our bilge pumps. ***Avant*** will take on a bit of water through the mast, and other leaks may appear over the season. We want a bone-dry bilge to keep interior humidity down. We know of several cruisers who have had a battery die due to bilge pump pumping, and another couple who lost their boat to flooding while on the hard (their cockpit drains blocked and water flooded in the companionway in a tropical storm). If your boat has a garboard plug, you can leave it out if you're on the hard, and if it doesn't and the concept works for your hull form you can consider adding one.

Through Hulls

We close all through hulls and tank vents and stuff stainless steel scrubbies or rolled up green scrubbies in them if we're on the hard. The scrubbies prevent bugs from nesting in the holes. Some cruisers use bromine tablets (for hot tubs) in their raw water strainers to discourage growth there.

Head and Holding Tank

We empty the holding tank and pump in 1 – 1½ gallons or so of vinegar and a liberal amount of Pinõl or Lysol type cleanser. Better to have that bake in the heat than what was in there before, and a completely dry tank will form concrete-like deposits.

Sails and Canvas

Sails and canvas are removed, inspected, repaired, cleaned, and neatly folded to be stowed below.

Engine

Our engine enjoys an oil change, fluid top up and wipe-down with an oily rag before we go, and we leave the compartment door ajar so air can circulate there too. Many cruisers do a freshwater flush of the exhaust as well, but we don't bother. Outboards are freshwater flushed, given their annual service, and run dry of fuel before stowing below.

Fuel Tanks

Diesel tanks are filled to the top and treated with biocide (BioBore or similar). Gas tanks are emptied, the gasoline given away, and the plastic tanks are treated with ArmorAll or similar. We don't bother trying to 'stabilize' gasoline for storage, the quantity doesn't justify it. Jerry cans are emptied and treated with ArmorAll or similar. The empty jerry cans and gas tanks are stored below.

Propane

We simply shut off the propane at the tanks.

Water Tanks

Water tanks are emptied. When we return, we treat them as if contaminated as recommended in this article. The water pump (and all other breakers save the bilge pumps) is shut off.

Mooring Lines and Fenders

If we're in the water, we double all mooring lines and add chafe guard (we use fire hose) at all chafe points. We buy cheap children's T-shirts and slip them over our fenders as extra chafe guard/ UV protection, securing them at the top end with small line or zip ties.

Even if you have a hired 'boat watcher' they're unlikely to be 100% available to come to your aid in a storm. They may be looking after multiple boats, or the roof may be blowing off of their house (or their mother's house) in the same storm that threatens your boat. You need to be secured for a storm.

Dinghy

We have a RIB inflatable dinghy, and some years we have been able to secure covered storage for it at the marina or yard we're at, which is best. Other years we secured it to the deck upside down, inflated to about ¾ normal pressure, spaced off the deck with dollar store pool noodles and covered with a tarp. Protection from the sun while ensuring its wrapping can't hold water against the fabric are the keys to success. If you can deflate yours and stow it below, that's even better.

Bottom Cleaning

If you store in the water, you will need to arrange for regular bottom cleaning. The interval will be determined by local conditions. Make sure the cleaner is reliable, has references, and sends pictures or other proof the job is being done: we know cruisers who found their cleaners simply cashed the payments and didn't do any cleaning until just before their return.

Contact Info

Post a card in the window with local contact information for your boat-watcher (if you have one) and your contact info back home: name, email, phone numbers.

When we return, we find ***Avant*** fresh and dirty, needing a good wash after we enjoy a Christmas-like morning: like an unwrapping party of all her tinfoiled appurtenances. After some reassembly, we're ready to cruise another season.

About The Author

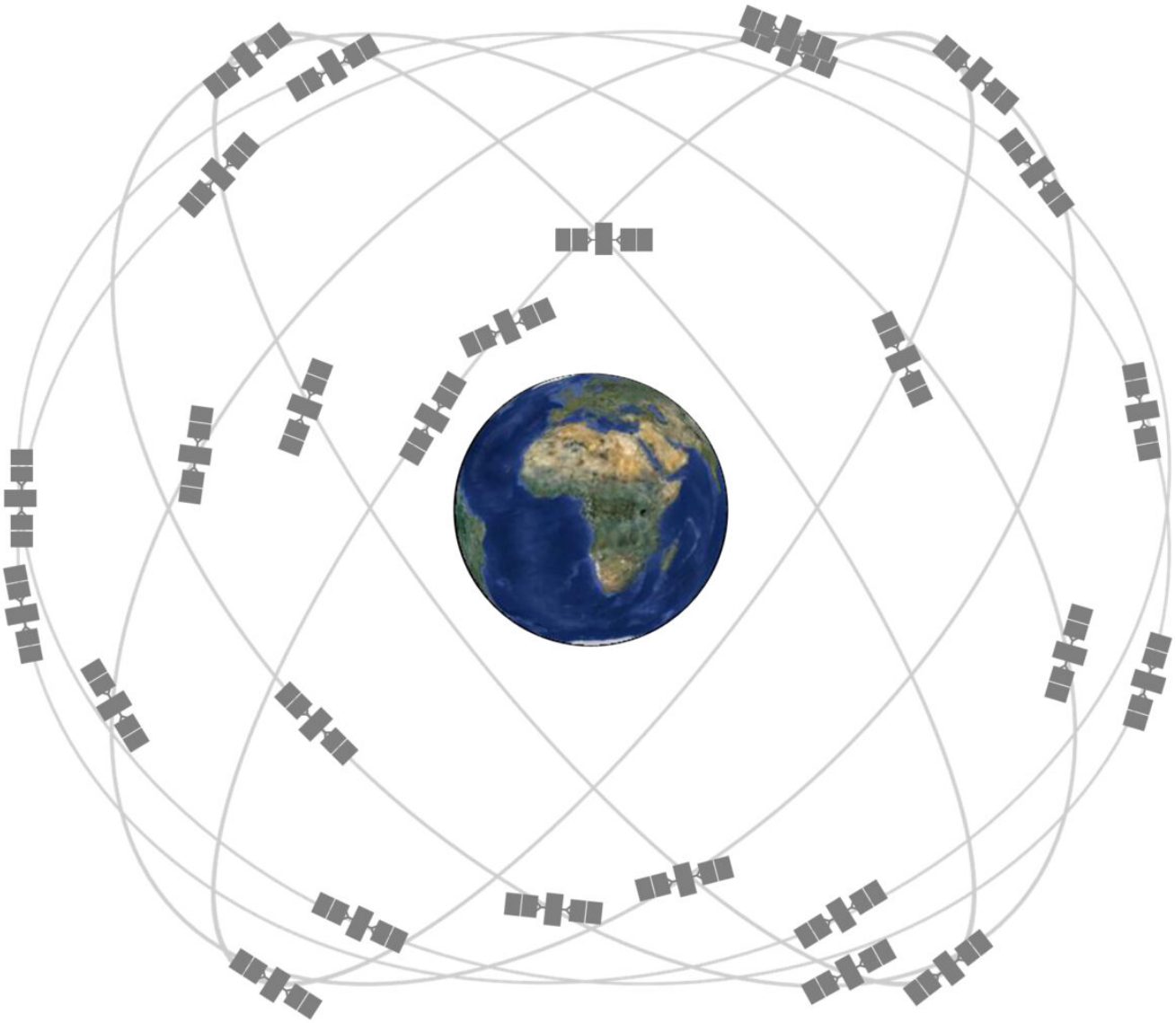
Rob Murray

Avant - Beneteau First 435 Sloop

Rob Murray and Debra Zhou are doers currently in El Salvador, Central America.

GPS and Chartplotters

https://currents.bluewatercruising.org/articles/gps-and-chartplotters/



Used worldwide, the generic term for satellite navigation systems with global coverage is Global Navigation Satellite System (GNSS), often referred to as GPS by boaters. There are a number of different GNSS systems in operation, such as BeiDou/Compass (China), IRNSS (India), Galileo (Europe), and QZSS (Japan). For boaters in the Pacific Northwest, we are going to look at two systems in particular, GPS (USA) and Glonass (Russia).

The Global Positioning System (GPS) was created in the USA with 31 satellites and two levels of security – Precise Positioning Service (PPS) for military and Standard Positioning Service (SPS) for everyone else. The Globalnaya Navigazionnaya Sputnikovaya Sistema (GLONASS) is a radio-based satellite navigation system developed in the Soviet Union with 24 satellites. Both of these space-based global navigation satellite constellations use signals sent to earth from multiple satellites that analyze how

far the receiver is from the satellite to give location data. There are 31 GPS satellites to ensure that 24 GPS satellites are operational at all times. Glonass has 24 satellites orbiting the earth that are inclined to a higher angle, providing better coverage at higher latitudes such as the Polar regions.

Initially, marine manufacturers used only GPS. The implementation of GLONASS for recreational users has been a huge step in maritime navigation. Manufacturers are now able to use GPS + GLONASS, which allows navigation devices to access all 55 satellites. Combining the two systems offers a faster fix and better accuracy. Two GNSS systems also provide redundancy if one goes down and, if both position fixes are the same, there is a better chance of accuracy. GPS + GLONASS is also being used in cars, smart devices, and sports watches, sometimes referred to as "assisted" or A-GPS and A-GLONASS.

Garmin GLO takes signals from both GPS and GLONASS. It connects wirelessly to many Bluetooth-enabled smart devices, BlueChart Mobile, and Fishing My-Cast. This allows GLO to lock on to satellites approximately 20% faster and remain connected even at high speed. The Bad Elf 2300 Bluetooth GPS + GLONASS receiver and data logger adds barometric readings for boaters with the built-in barometric sensor. The advanced USB connectivity allows the streaming of NMEA data directly to your device and adds easy access to recorded data logs, just like a thumb drive.

Can I add an antenna to my existing chart plotter?

If you currently have a GPS-only chart plotter, most manufacturers are now offering a GPS/GLONASS antenna such as the Garmin GA 38, the Furuno GNSS receiver, or the B&G ZG100. DualNav, the GPS/GLONASS antenna from Digital Yacht, is a positioning sensor that automatically switches between the two systems. DualNav utilizes the industry-standard NMEA data format, allowing older chart plotters as well as current generation products to take advantage of this new technology. It also allows the user to select a variety of different NMEA baud rates (4800, 38400, and 115200) to allow interfacing with legacy and newer systems. As an added feature for racers, it also supports a new TurboNav™ mode where GPS/GLONASS data is output at 10Hz and with an interface speed of 115200 baud, which is 24 x the speed of standard NMEA 0183 data. This improves slow speed navigation data as well as providing the best course and speed data in navigation situations.

Next time you are at your boat, check the "settings" menu and determine which type of antenna your navigation equipment is accessing. Situational awareness on the water saves lives—no doubt about it. Having the ability to access two sophisticated satellite systems just makes sense.

About The Author

Melissa "Missy" Gervais

As You Wish - Bayliner Avanti 34

Missy is a local cruiser in the Pacific Northwest and writes a blog called missygoesboating.com that looks at "everything cool for women who boat". She also writes for a number of boating magazines and has a feature column called "Missy Recommends" with Waggoner on-line. She has been working with Jeff Cote at Pacific Yacht Systems for the past seven years.

Currents Bluewater Cruising

The Bluewater Cruising Association

PDF generated August 05, 2021 at 9:34 PM