## How to Sail away from Lotsageddon

Contributed by Ray Jason 26 March 2010

In this, Part Two, of the Lotsageddon report: Self-reliance at sea Learning to sail Buying a sailboat Outfitting your boat Specific Lotsageddon preparations

Quite a few of you were intrigued by the concept I presented in my recent essay, "Sailing Away from Lotsageddon."

The core premise was that "a well-stocked and properly equipped sailboat is the ultimate escape vessel."

Some wise and balanced thinkers, whom I refer to as the Cassandra Choir, have been warning people that a variety of potential catastrophes are probably looming just below the horizon. These events could radically alter the way that we lead our day to day lives.

Many people are preparing for these possibilities, but the vast majority are not. The mainstream media have contributed to this citizen apathy by claiming that "the people in charge" can handle any emergency. But any sensible person who observed the way that the authorities responded to Hurricane Katrina would perceive such reassurance as pure absurdity.

Therefore, many people are joining with their neighbors in an effort to build sustainable local communities that require very little outside help. The Transition Towns initiative is an excellent example of this strategy. I applaud and encourage these efforts, but the purpose of these two essays is to inform people that there is another viable option for lessening the impact of any societal disintegration. That alternative is the ocean-going sailboat. In the first article I presented my "why to" information and in this one I will provide a wealth of "how to" material. This is not written as a totally inclusive guide, but it does serve as a pretty solid primer.

Self-reliance at sea

Sea gypsies are probably the most self-reliant people in the civilized world because when crossing oceans, there are no hardware stores, diesel repair shops or hospitals to turn to for help. Because of this need for self-sufficiency, sailboats have used highly sophisticated survival systems for decades. Reverse-osmosis water-makers that convert salt water into tasty fresh water were perfected many years ago. Sailing vessels have generated electricity by using wind turbines and solar panels for at least 20 years. Ham radio and single-sideband frequencies provide communication links that are far less fragile than the systems that landsmen typically use. All of these systems have been tested and fine-tuned and work brilliantly.

Because of our need to fend for ourselves when far from land, most sailors abide by the "hope for the best but prepare for the worst" philosophy. In my case this outlook spills over into my general worldview. Indeed, I hope that I am just a "Collapsachondriac" and that my concerns for the future prove to be wrong, but I have prepared for the worst, and now I will share that knowledge with you.

The vast majority of sailors are NOT wealthy yachtsmen. They are regular people who learned without spending a fortune doing so. Your local Parks and Recreation Department might have low cost sailing instruction. Don't be put off if it looks like the lessons will be done in tiny boats, because it is actually best to learn on small boats, since they are very responsive to the moodiness of the wind. And you don't need to have access to an ocean -- lakes or rivers work fine for mastering the basics.

There are also low cost sailing clubs in many towns, as well as programs offered through community colleges. The back of most sailing magazines will list many schools where you can learn sailing. The cost ranges from reasonable to extravagant.

Just hitting the docks at your local marina is a very inexpensive option. Most sailors are pleasant, easy-going people. If you express an interest in learning, and offer to swap some help with boat projects, you have a pretty good chance of picking up some free instruction. Volunteering to crew on local racing boats is another option. You will initially be given simple tasks, but if you pay attention and prove to be an agreeable crew person, you can swiftly learn a lot.

There are also "how to" books that provide excellent instruction on the basics of sailing. Many libraries will carry some of these. Otherwise, they can easily be googled up.

So, as you can see from the preceding inventory, there are lots of ways to learn basic sailing. Once that is achieved, you will need to learn "cruising skills." In a way this is even easier because the sailing magazines run a steady stream of articles dealing with topics such as anchoring, dinghy selection, outboard repair, food provisioning, navigation, and various potential emergencies at sea. A couple of inexpensive subscriptions to sailing magazines would provide you valuable information. Likewise, many libraries have current and back issues of these magazines.

Another excellent inexpensive resource is the USCG Auxiliary. They offer many free and low-cost courses in such topics as safe boat handling, first aid and coastal navigation.

Buying a sailboat

Just as there are many options for learning how to sail, there are also lots of ways to find a suitable boat that can be both your joy and your protector. When friends ask for suggestions, I recommend fiberglass boats in the 30 to 45- foot range. My preference for fiberglass is because they are light but strong. They are also low-maintenance and since they are the most prevalent on the market, they are reasonably priced. There are certainly merits to the other hull materials -- steel, aluminum, wood and ferro-cement -- so if that is your preference by all means go for it.

My size recommendation is based on the fact that the majority of the cruising community is composed of couples. Less than 30-feet and things get a bit cramped – more than 45-feet and the vessel becomes difficult for just two people to handle with all of that weight and power. Families with kids will probably be happier with a larger boat.

While you are learning basic sailing, you will probably start noticing boats that appeal to you. Owners love it when a stranger approaches them and says, "That sure is a fine looking boat...what kind is she?" By window shopping your nearby docks and by paying attention to the boats in the magazines you can become fairly knowledgeable quite swiftly.

Here is another tip for quickly increasing your knowledge. Go to a website called yachtworld.com. Then click on their

"brokerage" section and type in specifics such as "used, sail, fiberglass, 35 to 40-feet and under \$60K." Many possibilities will then pop up which you can scrutinize carefully. Almost all of these listings have multiple photos of the exteriors and interiors as well as the "specs" or specifications for that vessel.

Once you have a better sense of your needs and wishes, you can get serious in your search. Start locally by walking the nearby docks and searching for boats with "for sale" signs. Check the classified ads in your local newspaper and also in any free "shopper" papers. There are also regional editions of Sailboat Trader which can usually be found in convenience stores at a reasonable price.

Many sailboat designs have owners' groups who find each other on the Web and exchange information about their boats. So, for example, if you found yourself desiring the venerable old Pearson 424 design, you could google up their owners' page and see if they know of any sister ships that are for sale.

Naturally there are many listings in the back of the sailing magazines. Besides the glossy national sailing publications there are several regional ones that are published on newsprint that are also very helpful.

"Latitude 38" which originates in San Francisco is a good example of one of these. These are usually free and almost all sailing magazines have online versions that are also complimentary.

And there are professional boat brokers. Most marinas will have some of their offices nearby or you can find them in the yellow pages or online. These folks are quite different from the typical car salesmen who are trying to close the deal while you are there on the lot. Brokers realize the magnitude of your purchase, and they don't usually try to rush you into a decision.

And in speaking of the differences between buying a car and a sailboat, you'll be happy to learn about professional yacht surveyors. With most boat purchases you hire a specialist to carefully examine the vessel and then make a thorough written report of its strengths and deficiencies. Banks and insurance companies require this. But for "cash and a handshake" purchases this is not necessary. However, considering the value of the investment, a yacht survey is usually well worth the expense.

## Outfitting your boat

Hopefully, my suggestions will help you locate your dream boat. When that happy day arrives, your focus will then shift to preparing her for the rigors and joys of the open ocean -- what we affectionately call "blue water sailing." There are a few excellent books available to help guide you through this process. My favorite is Ready for Sea by Capt. Tor Pinney. In the spirit of full disclosure, I should mention that he is a friend of mine and that I helped edit the early drafts of his manuscript. Regardless, it is well written and contains a wealth of information that is understandable even to a novice. The other books of this sort also do this quite well.

It is important to emphasize that ocean sailboats are complex creatures. There are MANY systems that are vital to a sea boat that are not needed on your house, apartment, condo or yurt. Here is a list of some of them:

Anchors/Autopilots/Bilge Pumps/Diesels/Dinghies/ GPS/Ham and Single-sideband Radios/Life-Rafts/ Outboards/Radars/Roller-Furlers/Solar Panels/Wind Generators/Windlasses Now I realize that this list might seem daunting, but don't forget that once these items are installed, they will last a very long time. And more importantly they provide you a survival vessel that can escape difficult collapse situations, whereas that less complicated home or cabin is stationary and more vulnerable. Furthermore, most used boats on the market are already equipped with many of these systems.

Now I could devote thousands of words to arguing the merits of any of these pieces of gear, but it is probably better for the novice to educate him/herself using some of the methods that I mentioned previously. Pore over the magazines, read the "how to" books and ask questions of the other sailors in your vicinity.

Another excellent source for information on properly outfitting your boat is the West Marine Catalog, which is available free of charge from this nationwide nautical hardware store. Scattered within its pages are short "advisors" on just about every boat system you would desire.

And don't be reluctant to ask the old salts in your neighborhood for advice. It is usually both educational and entertaining. For example, if you ask them, "What is the best type of anchor?" you will be dazzled by how animated the discussion will quickly become.

Specific Lotsageddon preparations

Everything that I have described thus far would apply to anyone who wanted to wander the wide waters on their own sailboat. Now I will outline some specific preparations for long term self-reliance in case civilized society starts to unravel. Again, I emphasize that my hope is that this will never occur, nor am I insisting that it will occur. However, it seems sensible to me for people to prepare, in case it does come to pass.

Also, this is a good time to mention that most of the "how to" information that I have outlined thus far has been directed towards folks with very little knowledge of sailing. However, there are tens of thousands of sailors who already own ocean-capable sailboats who are either out living the cruising life or who have their boat positioned near their home. A lot of the information that I am about to share is directed towards these experienced sailors, because it would not take too much more effort or expense to make their boat a superb escape vessel.

The most vital needs in a survival situation are probably:

Water

Food

Shelter

Protection

Communications

Water

A human can survive for weeks without food, but that same human will only last a few days without water. On a sailboat there are two basic ways to stay supplied with drinking water.

The low cost option is to "catch" water directly from rain showers. I call this sky water; and it is delicious.

My system is simple and effective: an awning that dips towards its midpoint and funnels the rain through a hose directly into my tanks. I let the first couple of minutes of rain wash the awning clean, and then hook the hose up to the tanks. Coming from the foot-pump driven spigot down below, I then filter it through a Brita water pitcher. In my decades of cruising I have never run out of water and that includes ocean passages of 29 and 30 days.

There are other methods of herding water that utilize the side decks and the boom. These can be found in the "how to" books or by asking the owners of well-equipped boats who you meet on the docks.

The second option is a reverse-osmosis water-maker that converts sea water into fresh water. There are both manual and electric versions. I have a hand-powered "desperation model" that is so compact that it would fit into an oven mitt. It lives in the emergency bag that would get tossed into my life-raft if my boat was sinking. Obviously, it could also be used even if Aventura was not going down.

The electric water-makers only need to be run for a short period each day, in order to produce far more water than you need. They are low maintenance and some of them can also be pumped manually if there is a problem with your ship's electrical supply.

As for the problem of ocean acidification, I have heard no reports from my friends who own water-makers that this has become an issue. I also assume that the manufacturers of these systems are paying close attention to this, and are beefing up the filters to deal with any problems in this regard.

Food

Non-perishable foods are the mainstay of a survival vessel. Most sailboats do have refrigeration systems that can be powered by solar panels and/or wind generators. But they are mostly devoted to lengthening the edibility of perishable foods such as meat, dairy products and vegetables. On an extended voyage or if supplies ashore are cut off, there will be no food left to cool. So the fridge will just become a glorified beer cooler.

Because I have always been on the impoverished end of the sea gypsy financial spectrum, I have mostly sailed without refrigeration. But I have not suffered as a result of this. A quick inspection of my ship's cupboards reveals the following wealth of long term foods that are readily available from any grocery store:

Almonds/Beef Stew/Black Beans/Bragg's Liquid Aminos/Brown Rice/Cashews/Canned Beef/Canned Butter/Canned Chicken/Canned Clams/Canned Fruits/Canned Salmon/Canned Shrimp/Canned Soups/Canned Veggies/Cereal/Crackers/Dried Fruits/Egg Noodles/Equal/Fruit Cocktail/Garbanzo Beans/Gouda Cheese/Honey/Jelly/Lentils/Long-life Bread/Long-life Milk/Macaroni/Mac and Cheese/Mayo/Nutritional Yeast/Oatmeal/Paella Mix/Pancake Mix/Peanut Butter/Powdered Eggs/Powdered Milk/Protein Powder/Red Beans/Salami/Sardines/Spaghetti/Spirulina/Sugar/Tea/Tofu/TSP/Wheat Flour/Etc...

This inventory should demonstrate that eating aboard an ocean capable sailboat is not just beans and rice drudgery. Furthermore, I supplement these supplies with dehydrated and freeze-dried foods. I have dozens of #10 cans (about twice as big as a standard coffee can) filled with such treats as beef stroganoff, chicken teriyaki and dehydrated broccoli. A little water and a very short cooking time and you have delicious meals.

I also keep a supply of canned bacon, cheese and butter which are packaged in smaller sizes. If you google up "survival foods" you will find the contact info for purchasing these extremely valuable products.

Growing my own alfalfa and mung bean sprouts has been a tradition aboard Aventura for many years. A large jar of these tiny seeds will provide you months of tasty sprouts that are alive with nutrition.

There are also old sailors' tricks for extending the life of perishable foods without refrigeration. For example, potatoes, carrots, onions and cabbage will last quite some time if stored in cool, dark locations. Raw eggs can be coated in Vaseline to extend their usability and I wrap apples, oranges and zucchinis in aluminum foil to help keep them fresh.

An important component of the onboard, long-term food supply will be fishing and foraging. Fish, lobster and crab from the sea and clams, mussels and oysters from the shore are all mighty fine and nutritious foods. Seaweed is also something that might prove very valuable although I personally need to learn much more about identifying and harvesting the best types. I suspect that I will soon be visiting Amazon to search for books that will help improve my foraging skills.

Food drying, especially fruit, seaweed and fish, is also an area that requires more of my attention. I look forward to increasing my knowledge and therefore my food independence as I research this. My web surfing has failed to locate a good, affordable solar food dryer. There are plenty of electric ones available, but since they must run for hours, they are a huge drain on the boat's electrical supply. However, there are nice solar ovens already available and one of these is high on my wish list. Sun-baked bread is supposedly quite delicious.

In concluding this section, it should be emphasized that a well-provisioned sailboat can be an island of comfort and safety as the food "procuring" situation deteriorates dangerously for those on land during any severe catastrophe.

## Shelter

A person in his or her sailboat is like a turtle in its shell -- you bring your house with you. This also means that you can bring a nice supply of creature comforts as well. My library is a constant joy to me and positioned beside it is a nice selection of movies on DVD which I can watch on this very laptop. Naturally, I have plenty of music CDs aboard as well.

And for the high end boats with water-makers and propane water heaters, there are hot showers even a thousand miles from land. And if there is no longer any propane, they can shower as I have contentedly done for years, by using a very low-priced but efficient solar shower.

Being able to move your comfortable shelter is probably its greatest feature. If I was in the U.S. and some sort of societal meltdown began, I could depart in a matter of hours. I keep my diesel fuel, water tanks, propane supply and food always topped off. I would bid farewell to my local friends, email my more distant ones, go buy fresh fruits and veggies, check the weather forecast online and get underway.

I would then set a course for one of my favorite Third World countries – probably in Central America. There are several reasons for this choice. Because their basic infrastructure is less reliable than ours, they have adjusted to disruptions and can handle them better. Because of previous problems with the transportation of food, they usually have a supply stockpiled, so they won't become violently upset by the trucks not arriving. And they don't have the "entitlement" issues of the citizens of the wealthier countries. Essentially, in my opinion, these folks have always demonstrated a better capacity to fend for themselves.

Your floating home also becomes your personal doctor's office. There are excellent books available that detail first aid onboard. Their instructions range from minor to surgical. These books will also suggest what supplies and medicines to

have onboard.

Protection

Now this is a topic that always inspires a very animated discussion. Let me begin by talking about the issue of piracy. My first "Lotsageddon" article generated considerable email from folks worried about pirates.

Most of the attacks that draw a lot of media attention are directed towards very large ships and not at small sailboats. When there are incidents involving cruisers, the word gets out so quickly through the ham and single-sideband radio nets, that it is easy to avoid the problem areas. Essentially, there are only a few dangerous regions and since we know where they are, we don't sail there. Would you vacation in Afghanistan?

Very few sailors out cruising lose any sleep worrying about brigands with AK 47s. As a friend of mine sums it up, "The chance of getting harmed by pirates is about as likely as being crushed by a Sumo wrestler falling from the sky!" But when preparing a sailboat for unknown future scenarios, a discussion of weapons onboard is a wise idea.

Many, if not most countries force you to surrender any guns that you have aboard when you check in with Customs and Immigration. Failure to do so can result in fines, jail time and confiscation of your boat. But the likelihood of any sort of attack is greater when close to shore than it is in open waters. So just when you might need your weapon, it is locked up in the Customs office.

Some sailors deal with this dilemma by hiding things deep in the boat during the inspection process, and then moving them to a more readily accessible area when the authorities leave.

There are legal forms of protection with less stopping power but still considerable impact. This would include flare guns, pepper spray, crossbows and spear guns. There are also adapter kits available that allow a flare gun to fire a shotgun shell rather than a flare.

Only twice in all of my years and miles of cruising have I felt genuinely worried. I slept those nights with my loaded flare gun, pepper spray and cocked spear gun very close to my bunk.

One of the hallmarks of my personal defense strategy is that I would NEVER use lethal force just to stop a thief. If someone is threatening me or a loved one with bodily injury I would respond appropriately, but I would not shoot my spear gun at the back of somebody stealing my dinghy.

If I felt someone hop aboard my boat I would keep the hatches shut and blast them with my air horn from down below while switching my deck lights on and off. If that did not convince them to leave, I would proceed to more assertive tactics.

One protective layer that I still need to investigate is a simple car alarm style horn that I could activate from down below if I sensed an intruder. The motion-activated ones are not ideal onboard since boats are often moving due to waves and wakes. But a manual one might be a very effective dissuader.

## Communications

Often when there is a severe natural disaster such as an earthquake, the normal communications systems are completely disabled. Instead, the first on the scene reports are usually transmitted via Ham radio operators. The reason for this is because there is no intermediary infrastructure involved. There are no cell phone towers or underground cables or bundles of fiber optic strands.

As long as the receiving and transmitting radios are functioning, communication is possible. And since these radios can easily remain charged up using solar panels and wind generators, the ocean sailor has a far more reliable communication system than people back onshore. In a potential collapse situation this is very comforting.

Conclusion

Through these two Lotsageddon essays I have tried to inform people that major societal problems could face us in the near future. I then supported my premise that an ocean going sailboat is possibly the wisest escape vessel. And finally, in this article, I have tried to instruct both the novice and the veteran sailor on the necessary preparations to get a boat ready for such an endeavor.

I have done all I can. Now it is up to you. For you are the captain of your ship and your life. As we say in my world, "I wish you fair winds and following seas!"

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See Part One: "Sailing away from Lotsageddon" by Ray Jason on Culture Change.

Ray Jason (roamalone8@aol.com) supports his cruising by writing lighthearted articles for the sailing magazines. Obviously, he also thinks about and researches more serious topics. His book, Tales of a Sea Gypsy, is available from Ray's publisher at www.paracay.com. A bookstore can order it and it can be found at www.amazon.com.

Further reading:

Sailing into the Future, by Captain Michael Kellick, February 25, 2010, on TheOilDrum.com and EnergyBulletin.net.

See the new website sailtransportnetwork.com

And learn about the Sail Transport Company in the Puget Sound.