Boats for post-cheap oil survival

Contributed by Ian Swan
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Dmitry Orlov introduces:

This is a guest post from Ian Swan. As some of you know, I have sold my shoreside residence, and for more than a year now I have been living aboard and sailing up and down the east coast of the US. I have done this both as a lifestyle choice and as a way to minimize costs, including fuel costs, and to maximize the available options. For many of you, such a dramatic change of habits is out of the question. But this is not to say that you should neglect to look at boats as an important element of your post-collapse preparations. Ian's article takes this subject, which for most people resides in the realm of daydreams, and brings it down to the level of practical reality. Unlike many sailing experts that might try to impress you with their opinions, Ian knows his stuff, and, very importantly, he isn't trying to sell you anything. So if you are one of the many people who think that having a "just in case" boat might be a good idea, but have not acted on it, this article is for you.

To introduce myself: I am a New Zealander living near the coast in the North Island. I also lived for nine years in the South Pacific Islands, where I was able to observe primitive, third world living conditions. I share the view that peak oil is going to have a big effect on our lifestyles, and the simultaneous arrival of economic troubles and climate change is setting up a "perfect storm." If things collapse as Dmitry, I, and many others are expecting, you may find yourself in the same situation as a third world hunter (fisherman), gatherer, and farmer. That was the normal situation for many in the South Pacific Islands when I lived there. I'm not saying that we will return to the stone age, or even to the dark ages, but cheap oil -- the basis on which the edifice of our current society is built -- is gone, and the debt bomb is about to explode at the same time. This combination could create a tipping point that could cast you into an economic and social situation which will rival the Great Depression. If you agree with this (and if you are visiting this site it suggests you might) then you should make some preparations, at least in your mind, about what you would do, and how you might survive in this scenario.

Specifically, you might want to ponder the question of food. It has always struck me how much easier it is to get protein from the sea by fishing, and gathering shellfish, crabs, and so on, compared with land-based hunting and gardening. The same applies to a lesser degree to a lake or a large river. There is always food to be had where land meets water, it's a particularly productive environment, once things settle down in a post collapse environment, living near water will offer many opportunities for fishing and hunting, and travel by water. One of the keys to exploiting the sea coast or a lake for food is a boat, or a canoe, and this brings me to the point of this article: we have an opportunity to prepare for post-oil and post-consumer society by getting an appropriate boat, or, better yet, several appropriate boats, as I have.

The use of boats as a means of transport should also be considered. In common with Dmitry, I believe that sail is the way to go. If the boat is small enough, then rowing or sculling can be the source of auxiliary power. The smaller the boat, the more effective and practical this manual propulsion can be.

This article is not intended to be an introduction to boating, so if boats, and especially sailboats, are outside your experience, then I suggest that you get some books on the subject. Older books may be better, since what I am suggesting here is not particularly modern or high tech.

If your experience is with power boats, then I would suggest that you need to change your thinking. The cost and availability of fuel may soon make a modern powerboat a useless asset. The large, high speed "fizz boat" is the pinnacle of gross, wasteful overconsumption of oil-based fuel. Fuel consumption in big, fast powerboats can sometimes be measured in gallons per minute, and it is certainly many gallons per hour. They make Hummers look good.

There is an opportunity right now to try and get used sailboats and sails, which can often be had for very little. A great place to start is your local Craig's list. A boat is quite a big item, so you don't want to have to go far to get one, or the cost of delivery will become significant. If the boat is a real bargain, it may be worth traveling to get it. Even if the hull itself is worthless, what's on it may be very valuable indeed. For instance, the modern Dacron sail is a dramatic improvement over a canvass/cotton sail in terms of durability and function. If, at some time in the future, when modern synthetic fiber is no longer available or affordable, you try to fit out a sailboat, you will curse your lack of foresight in not obtaining a cheap old Dacron sail. Oars are not cheap or easy to make either, so if you see some cheap used oars, grab them.

Think about what might happen to you and your family in a collapse scenario, and also think about what boat might be useful for your location and situation. Even if you live miles from water, have you seen how useful boats become if you are caught in a flood? Right now, there is the opportunity to buy, or even to get for free, old sailboats that are sitting unused and deteriorating in backyards. I know this because I have collected quite a few of them myself, often for a fraction of the value of their fittings and construction costs. One of the reasons for this is that most people do not want small sailboats any more: they want big yachts or high performance racing sailboats such as Lazers and Hobie cats, which leaves the older class of boats unloved and unwanted. Owners also do not want wood, or plywood, for the maintenance problem; so these go cheaply too. There are two types of sailboats available that I think are most suited to

the "survivalist" and these are the small trailer sailer and the small sailing dinghy. I am not talking about a boat to live on, but a boat that you can use for fishing, perhaps to make short coastal passages, on lakes and rivers: something that might carry you plus a small load of cargo for trade if such conditions arose. A boat has huge carrying capacity compared to a cart, and, once it is supported by the virtually frictionless water, takes very little energy to move. The trailer boat is mobile, compared to a boat on a mooring or at a marina, and mobility gives you choice of location. The ongoing cost and worry of boats sitting in the water is a killer. I don't recommend them, unless you know that you are going to use them a lot, and have plenty of money. A boat sitting on a trailer, under a tarp, in your back yard, will cost you nothing.

If you study the canal boat industry, you will discover that boats have enormous energy efficiency and cargo weight advantages over the horse and cart and the pack horse. The canal boat was only replaced by rail because of its low speed. Take away cheap oil, and the boat will make an instant comeback as a freight carrier. Take away the roads, and suddenly the rivers and the seacoast will provide the only access. I grew up in a town called "Te Awamutu". Which literally translates from the Maori language as "The Path End". It was the point at which the local river was no longer deep enough to navigate by canoe. That's the way it was; and it soon may become that way again.

The practical, useful sailboat you should be looking out for is a 10 to 14-foot open sailing dinghy or a 14- to 18-foot cabin trailer sailer. These are boats of a size that you can manhandle to launch if necessary. You could drag then up a beach on rollers with manpower or block and tackle. A 20 foot boat is getting pretty big, but may be manageable if you have lots of strong men. You can get a plywood boat very cheaply, but the reason for this is that it may be rotten. In fact, I usually assume that it is, and only agree to pay salvage value. If it is on a trailer, the value of the trailer may be as much as the boat. What comes with the boat, in terms of gear and fittings, may be worth even more than the boat. I paid $500 for a derelict 21-foot boat that had an anchor, chain and rode that were worth $250 second hand and easily $500 to replace new. It also had a mast and rigging, two sets of sails (one brand new), lots of stainless steel fittings, and safety gear. I will probably never repair this boat, but I have it blocked up as a little emergency "cabin". Did I mention that it has 500 lbs of lead in the keel? (Lead now goes for about 90 cents a pound.) All this gear is worth something to me as I have other boats worthy of repair. In a survival situation, all this stuff will be gold. To be a collector like me, you have to have space to store the boats, and I am lucky as I have a small farm and some old barns. But there must be a few of you out there who have the space to store one boat at least.

An 11 or 12-foot dinghy is a good size for a fishing boat that can be sailed or rowed. A boat like this could be either plywood or fiberglass. Fiberglass will cost you more and be heavier, but it will also be virtually indestructible if it is well-made. An aluminum mast, with stainless wire rigging, and a Dacron sail are all standard on modern sailing dinghies. There should be a mainsheet and a pulley set for the mainsail, which vary in quality and can be expensive to buy new, and maybe a foresail jib with sheets. In New Zealand there is a dinghy of this type, called a Sunburst. The Mirror Dinghy would be the British equivalent. It was designed in the 1960s as a "family boat": mom, dad and the kids could go out for a sail or fishing. The kids could learn to row and to sail. It could take a little 3-horsepower outboard for longer trips. Great concept! What happened? It became a racing class. The boats were "refined," made self-bailing, no seats, redesigned for speed and minimum weight, and now cost $14,000 for a competitive boat. They are fragile and completely useless for fishing. This has been the pattern for modern sailing dinghies: they are fast, unstable, and uncomfortable. Most are unsuited to use as our "survival" utilitarian boat. You might be able to adapt one of these racing machines, making it useful by reducing the sail, fitting oarlocks for oars and adding seats and floorboards to give it strength. But even if you can't, at least you will get a mast and sails. I actually got one racing skiff with 4 sets of sails for $100. I figure the sails could be used on a big family trailer sailer for light wind days. But there are also perfectly reasonable sailboats out there if you look.

Whatever you can get in the way of a hull, a mast and some sails will be vastly superior to anything that you might construct if you were to start from scratch. Of course is possible to build a wooden boat from timbers, make a mast from a straight pole, weave a sail from flax or cotton, and make the rigging from wire and rope. But this is a skilled task way beyond most of us, and I can assure you that having some kind of boat ready made -- any kind -- will be a lot easier. What I see as most important in a collapse situation is being able to make the transition from being completely dependent on the supermarket as your main food source to becoming self sufficient, and from the motor car and airplane to the horse and the boat for transport (and bicycles while they last). Eventually we, or the community we are part of, will have to re-learn the skills to make things from scratch with hand tools, and to croos oceans hand-made boats, as we had done for centuries. That's fine, but meanwhile, in the short term, we need to eat, and there is good fishing on that reef a mile offshore.

So if you have a driveway or a back yard you can use to store a boat, start looking now. A good size for trailer yacht is in the 16 to 22-foot range; they run up to 25-30 feet but these are expensive monsters, and you would need a big SUV or truck to haul and launch them. You would have to pay more for a fiberglass hull, but if you look on Craig's List or other local sources you will find the odd one going cheap for various reasons. Sometimes the owner just wants to move an unused boat and does not have the time or energy to "sell" it. Wives sometimes have a role in these decisions to sell boats. You just have to be there at the right time. Right now, people are under pressure financially, and need to sell their unused stuff, which may include their boat. I have bought some very well-made plywood boats a fiberglass outer layer (GOP, glass over plywood). I have also seen hulls that you could punch your fist through, as they were not made of marine ply. I see smaller, older fiberglass (GRP, glass reinforced plastic) trailer yachts on Craig's list in the $1000 to

$2500 range. A new boat, provided someone is still making them, would cost $20,000 or more. Depending on your level mechanical skill, an outboard motor that comes with the boat may be worth having, especially if it is a simple 2-stroke. A new outboard may cost more than an old boat. Post cheap oil, an old, inefficient 2-stroke outboard may be expensive to run, but even when fuel is very expensive, a small engine may be a lifesaver when needed in an emergency, and worth having. If you only use it as a backup, fuel cost is minimal.

The trailer yacht usually has a small cabin with sleeping space for two (or more, but they have to be very good friends) and a minimal setup for cooking. It can be used for overnight trips, and is secure and dry in bad weather. It can be used as a sleeping "cabin" even on land. If it is raining and blowing hard, it will be more secure than a tent. There is usually a lifting centerboard, which allows the boat to be beached and sailed in shallow waters, which is a very useful feature. A conventional keelboat is very restricted as to where it can navigate. It is possible to capsize some trailer sailboats as the ballast is usually not as massive as with a keelboat, so be aware these boats are not bombproof, and sail conservatively until you really know what you are doing. With these boats, you have to be aware of what's happening with the wind and react quickly and appropriately. They are not ocean going yachts unless so equipped and sailed by experienced sailors. The reason I suggest older and second hand boats is that you get a lot of boat for your money. You don't want to spend a lot on something you might not use. Recycling is always a good principle.

Even if you plan to sail whenever possible, fuel efficiency is still an important consideration. One small trailer sailboat I bought has a small air cooled 3HP diesel engine in it. I would think you could hardly get a more energy efficient fishing boat than this. At slow speed, it goes for miles on a pint of diesel. The problem with many fishing vessels these days is that the cost of fuel is not covered by the value of the catch. Whole fleets of them sit tied up at the dock. This relates to the depletion of fish stocks as well as to fuel costs, but the result is the same: only a very appropriately sized and fuel efficient boat will remain economic on a cost/catch ratio. I think that my boat, with sail backup, might actually be efficient enough. The key to the fuel efficiency of small trailer sailboats is that they are displacement hulls being driven at less than their hull speed. This means they are slow, 5-6 mph, but very efficient. The faster you try to go, the less efficient they will be. In certain conditions, you can use motor and sail together. When fuel gets really expensive, motoring in a small boat may actually be the most efficient way of maximizing the load/mile of the fuel. It won't be fast, but it may be cost effective.

Other boat options to consider, which may be appropriate to individual situations, are kayaks, canoes, folding boats (Portabote is one company that makes them), and inflatable boats. I recently bought an inflatable kayak with the idea that I could carry it deflated on my back on a bike explore waterways that I can bike to. I can use it as a platform for spear fishing or shellfish collecting. Kayaks and canoes are good for small shallow rivers and lakes and can be carried by hand across or around obstacles. But people also make long ocean trips in appropriately equipped kayaks, and they make good fishing platforms with the right gear. Modern plastic kayaks are very durable.

Inflatable boats can be stored in small spaces, carried more easily deflated, and are very stable and great load carriers. They are harder to row, especially upwind, because of their high windage. When I was in the islands, I had a 10-foot inflatable which I could carry inflated on my back. I could carry it down steep banks and launch in places you could never get a trailer. The boat would carry 4 men and scuba gear for 4. A similar size hard dinghy would not do that safely. It was appropriate to the task and situation. But an inflatable is not as durable or long-lasting as aluminum or fiberglass, and is only good as a short-term survival boat. Portabotes, on the other hand, are made of thick dense plastic and fold up. You can row them and there is the possibility of a small sail, or a small motor. They are quite durable, and may be appropriate for your circumstances. Have a look at them on their website.

I hope I have given you some food for thought. The time to prepare is now, an the time to practice self sufficiency is now. And besides, boating and fishing are fun, and what could be a better incentive than that?

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