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Fuel Saving Tips

FOR YOUR BOATING THIS SUMMER

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Fuel Saving Tips

Fuel costs are directly related to how much your boat is used and how fast you drive it—the same as any vehicle. But, now that fuel prices are skyrocketing, it has a direct impact on our boating pleasure.

Brenda and I have come up with 27 ways to save money on fuel this boating season, so that you can maximize your boating pleasure while minimizing your fuel costs. It is amazing what you can come up with when you set your mind to it.

- Put your boat on a diet!** Shed those extra pounds from the bilge and lockers. Empty out all those extra items that you really don't need aboard; for example, extra oil, extra spare parts, tools, ropes, canned goods, cruise books—keep just the essentials. Look at each locker, cupboard, drawer, box and storage space. What don't you need and what do you really need aboard? Take it home or put it in your dock box. You can always take them on long trips that you really need them for. Not dragging around all this extra weight will save you fuel dollars. **Run on the bottom half** of the fuel tanks, rather than burning extra fuel to haul around full tanks. You will have to visit the fuel dock more often, but it will save you money. Water weighs over 8 pounds per gallon, so don't drag around the weight of an extra body on board in your water tanks, if you don't have to. Empty your holding tank often to reduce the weight carried aboard.

Put your boat on a diet

Run on the bottom half
- Tips When Fuelling** – Fuel storage tanks are underground and the colder the ground, the more dense the fuel, so fill up early in the day when the ground is still cold. When the fuel warms up, it expands and, as a result, a gallon isn't really a gallon.

Pump on low mode to reduce the vapors while pumping. Many pumps (not in

Ontario) have a wire coil around the nozzle that returns the fumes to the underground gas tank—gas you are paying for but not getting. Gas tanks on cars are not vented (closed unit) so do not experience any measure of evaporation of gas. Boats, on the other hand, because they are vented, do have some measure of evaporation of gas.

3. **Tune up the Motor(s)** Like vehicles, boat engines that are well tuned and regularly serviced, are more fuel efficient than those that aren't, so be sure to tune up your motor(s) and service them regularly including oil and filter changes once a season. Reduced friction saves fuel. It will also help the environment.

**Reduced
friction
saves fuel**

4. **Prop Right.** Make sure you are propped correctly and that the prop(s) has no dings or gouges. Use a computer prop sizing service to ensure that you have the right diameter, pitch, blade area, and prop configuration. You could save up to 1 gallon in every 10 gallons of fuel.

5. **Reduce Speed** or at least drive at a speed of less than 1800 rpm. For the typical boater who is using the boat for short weekend cruises from the marina to nearby pre-selected destinations, this is the best way to save money on fuel so that the hull is displacing, rather than pushing it up on to plane. If it is a relatively short jaunt of a few miles, and it takes twice or three times as long, so what. Enjoy the view and save.

**Enjoy the
view**

Decreasing speed in a displacement hull by only 10% could save you 20% in fuel costs. Cutting speed by 1 or 2 knots can cut consumption 30 to 50%.

A planing hull on plane, has the greatest fuel economy at the point where it first comes onto plane and skims the surface of the water. Limiting the amount of time a planing boat displaces water before coming onto plane will also use less fuel. But,

you need to bring the boat up onto plane at a quick steady pace instead of hammering the throttle(s) or taking forever to get there. The most efficient speed varies from boat to boat.

6. **Keep your boat bottom scrubbed and clean**, so that you are not dragging a carpet of marine growth that zaps power and wastes fuel.

Keep the bottom clean and free of weeds and barnacles. To feel how much drag there is, the next time you are at the beach, pull a beach towel through the water. If your boat is trailerable, scrub the bottom regularly. On a larger boat, scrub it next time you go to the beach, with a long handled scrub brush.

**dragging a
carpet of
marine
growth**

7. **Paint Your Bottom.** If you are boating in water that encourages the fast growth of algae on your bottom, it would be worth your while to paint the bottom with antifouling. It is important to use the right paint to reduce the friction most.

8. **Diesel Power.** If your boat has diesel power, you paid more in the beginning but you will be saving on the on-going fuel costs over the same gasoline powered vessel. Diesel engines cost less to run than gas and they are most efficient when run at 80% of maximum speed.

9. **Switch to closer destinations.** If your activities include many long distance trips, you should consider choosing closer destinations, or run at a lower rpm to get there. Slower and closer will save fuel dollars.

**Slower and
closer will
save fuel**

10. **Stopping at the highway gas station.** You have probably noticed that the price of gas at gas pumps on the water, (either at a marina or municipal dock) is higher than on the road. This is because of the fuel distribution system based on the lower fuel volume sold on the water versus the highway. If you are running a trailerable boat, you can obviously save money on fuel by stopping at

the highway gas station on the way to the ramp. However, it may be a short term saving and cause problems later. With the addition of ethanol to gasoline, there have been many problems with boat motors around clogged carburetors and other problems. Unlike gasoline purchased for cars, gasoline purchased for boats is normally stored in the fuel tank for several to many weeks. This is where the ethanol causes problems. To eliminate these problems, many marinas only stock and sell premium fuel which contains less or no ethanol compared to regular unleaded. In short, buy premium fuel for your boat as well as your yard equipment like lawn mowers and chain saws where the fuel is not going to be consumed during the week of purchase. Marinas who sell low/no ethanol gasoline and who add additives to the tank to help reduce negative effects on your motor, have a sign posted at the gas pumps.



Tip

If your boat is docked at a marina or yacht club, I **DEFINITELY DO NOT RECOMMEND** purchasing fuel at the highway gas station and transporting it in portable containers to the boat. This is a very dangerous practice and also unlawful in certain jurisdictions.

11. **Accelerate slowly and Idle Less.** Like a vehicle, the action of acceleration consumes the highest amount of fuel. Accelerate briskly without hammering it and you will reduce your fuel costs considerably. It is amazing how many boaters feel they have to idle their engines in the harbour as long as they warm up their cars in the dead of winter. You only need to warm up the motors for a few minutes so it doesn't die when you shift into reverse. If you motors are carbureted, idle longer to warm them up so the choke comes off. Idle Less—Save Fuel.

**Accelerate
slowly rather
than
hammering it**

12. **Pick the dead calm day.** If you have a choice of boating on a rough sea, a slight chop or a dead calm day and it really doesn't matter to your schedule when you go, then pick the dead calm day. Idle your way along and you'll save fuel, because you are going slower and you are not bucking a head wind or climbing hills.
13. **Pick the day with the slight chop.** If you are going to run on plane, pick the day with the slight chop. On this water, the friction of the bottom will be reduced and you will run on plane more efficiently, because the chop introduces air to the boat bottom which reduces the friction on the water's surface.
14. **Avoid the days when there is a high sea rolling** if your schedule permits, because the motor uses more fuel climbing all those hills and being constantly slowed and forced to labour.
15. **Go With The Flow.** Run with the tide or current when you have a choice to get a boost from mother nature.
16. **Run with the Wind.** If your course is flexible, consider wind direction to save fuel. Running against the wind burns more fuel. Running on the quarter burns less. Running down wind burns even less because the wind is giving you a push.
17. **Look Behind.** Even if you have an autopilot, you should look behind and check your wake. Most autopilots steer straight (not always) and sometimes the captain zig zags through the water. The shortest distance between two points is a straight line. So, if you are zig zagging or leaving a snakes trail, you are burning more fuel than you need to. Also check the size of your wake. Large wakes are expensive wakes because the boat is desperately trying to climb up on top of the water's surface. To save fuel, either slow down to create a smaller wake, or

**more fuel
climbing all
those hills**

**The shortest
distance
between two
points is a
straight line**

speed up onto plane to create a smaller wake. Either way, you will reduce the amount of fuel being used.

18. **Take turns going boating with friends.** Invite your friends to go boating with you. Hopefully, they will take you boating with them another day.
19. **Use a kicker.** If you are planning on going a long distance at a slow speed (like trolling), then buy a 9.9 hp outboard motor and use it instead of your big V-8's. You will save a ton of fuel.
20. **Keep the boat closer to home.** If you don't have to commute 1-5 hours on the road every weekend to get to the boat, you'll save on commuting fuel in your vehicle. You will probably be able to enjoy the boat more often as well, because it won't be such a chore to get there.
21. **Use the generator less.** Instead, use the BBQ rather than the electric stove. Turn off the air conditioner and wear less. You get the picture.
22. **Reduce Windage.** To reduce your windage, take off the canvas—especially the vertical panels, because they act like a parachute requiring more fuel to move the boat. Tops that are horizontal at the dock are angled when running and act like a parachute as well, creating more drag. If you are going to run fast, run topless.
23. **Consider a fuel flow meter.** Adding a fuel flow meter will give you visual feedback on exactly how much fuel you are burning, so you can adjust your speed and driving habits accordingly to save even more fuel. You will also have proof your efforts are paying off. If you get the computerized fuel flow meter, it will do the calculations for you on the fly—the same as in some cars.

**If you are
going to run
fast, run
topless**

24. **Trim Your Boat.** Using trim tabs and power trim wisely prevents plowing and reduces drag allowing you to run on plane at a lower rpm. This will help your boat move through the water more efficiently, run quieter and save fuel as well.
25. **Do the Math.** To find out which changes that you make give you the best results, you need to do the math. Keep a detailed log of your fuel usage before and after you make changes. After every fillup, record the fuel replaced, operating hours and distance travelled. You will be able to tell which changes work best for your boat to give you the best fuel savings.
26. **Fuel Card and Membership Benefits** – Some credit cards give you points for product and/or services. Use these cards to pay for fuel and enjoy the points bonus giving you more for your fuel dollars. Also, some memberships offer a fuel discount at some marinas. Also, pay attention to membership benefits of marine organizations. You may already qualify for cheaper fuel and not know it.
27. **Find activities that don't require fuel**, like swimming from the boat, a meal on the water while the wind and current take you back to the harbor, closer destinations—smell the local sea air.

**Which
changes give
you the best
results?**

Several years ago, Brenda and I decided to enjoy our boat after work. At 5:00, we left the office with a picnic basket, drove 5 minutes to the boat, idled upwind out into the bay a few minutes then turned off the motors. As we drifted back to the harbor over the next two hours, the silence, cool breeze, barbequed steaks, sunset—everything was fantastic. Now we do this regularly and take friends with us. It's a great way to enjoy the water, socialize with friends and save on fuel.

Brenda and I are cost conscious, but don't let the fluctuating price of fuel put a damper on our boating. We really look forward to and concentrate on the positive, enjoying our drifting, dining and watching sunsets for example.

Everything is relative. For every \$100 spent last year, you'll be able to save a percentage of it with some fuel-saving practices.

Remember that fuel is only a fraction of your boating investment. Save where you can and re-apply those savings to enjoying your boat more.

**Don't let the
price of fuel
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boating
enjoyment.**

Don't let the price of fuel get in the way of your boating enjoyment.

Doug's Credentials

- 5th generation in the boat business
- My Dad, Art Dawson, taught me to drive boats as soon as I was tall enough to see over a windshield
- At the family marina, (Dawson's Marina on Lake Simcoe, ON) I sold, drove, demonstrated and docked thousands of boats—power and sail—from 15' to 60' for 30 years.
- As a Sea Scout Master for 10 years, I taught my Sea Scouts to sail and be safe around water and well as good citizenship.
- I have boated all my life on the Great Lakes, The Bahamas, Florida, the US East Coast, Intracoastal Waterway and Ocean for pleasure and to deliver new yachts.
- I have reviewed and tested boats for Canadian Yachting and Power Boating Canada Magazine for over 20 years.
- I have piloted and demonstrated yachts for Yacht Manufacturers to international dealers and media.
- I Organized Boat Shows and Poker Runs for decades.
- I have taught thousands of boat owners on their boats “hands-on” how to drive and dock—all sizes and types of boats—power and sail.

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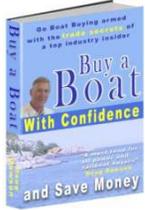
Dawsons e-Lessons

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 Docking your Single Outboard O/B - Advanced
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 Docking your Twin Outboard O/B – Introductory
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 Docking your Twin Sterndrive I/O - Advanced
 Docking your Twin Inboard I/B – Introductory
 Docking your Twin Inboard I/B – Advanced
 Docking your Sailboat
 Docking your S O/B & S I/O Houseboat

Docking your T O/B & T I/O Houseboat
 Docking your Twin Inboard Houseboat
 Anchoring Your Boat
 Communicating Aboard
 Conquering Wakes
 Docking While Cruising
 Enhancing Your Boat
 Enjoying Your Dinghy
 Making Ropes Into Lines
 Ramping Your Boat
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