Bon Voyage to Bad Boating Habits

Boats and clean water can mix

There is just something about the call of the water that draws us toward the shore—whether it's the shore of a lake, a river, or an ocean. Maybe it's because the shore offers us so much. We can fish, swim, ski, dive, snorkel, canoe, kayak, float, read, sleep, or simply sit and people watch. Whatever it is that draws them, tons of Americans hear the call of the water and follow it every year. And for many of us, that call includes heading out on a boat. More than 10,000 marinas dot the coastlines, lakeshores, and river edges of North America.

Help Keep the Waters Clean!

Boaters glide on the "rooftop" of lakes, rivers, and oceans. How well do they respect the residents below? Sometimes not well at all. Studies have shown that more than 267 species of marine organisms are known to ingest or have become entangled in marine debris that have been thrown overboard.

The Center for Marine Conservation reports that plastics account for more that 50 percent of all marine debris. Unfortunately, plastic pellets and plastic bags are often mistaken for food by fish, turtles, and other animals. Eating them can cause internal injury, intestinal blockage, and starvation. Other types of trash, such as monofilament fishing line, plastic straps, and six-pack holders, are just as deadly because creatures get tangled up and drown. So remember, tossing trash overboard could leave death in your wake.

Every time you get on a boat, encourage everyone aboard to adopt a policy of *carry on—carry off.* And once off, dispose of any trash properly.

Also use onshore rest rooms if there is no sanitation device on board. After all, you wouldn't relieve yourself in your swimming pool, and you shouldn't use lakes, rivers, or oceans as a bathroom either. In fact, a single weekend boater flushing untreated sewage into our waters produces the same amount of bacterial pollution as 10,000 people whose sewage passes through a treatment plant.

Every boat with an installed toilet should have a marine sanitation device (MSD). MSDs retain or treat waste until it can be disposed of properly at a marina pumpout facility.

Several marine mammal, sea turtle, and bird species are in danger of extinction in large part from entanglements in fishing gear and other debris. This turtle was killed by boat debris.

Eco-Boat Maintenance

If you've ever accidently splashed a little gasoline on your hands when filling a car tank, you know that gas smell is pretty powerful and sticks around a long time. In fact, as little as one quart of oil or gasoline can contaminate up to 250,000 gallons of water. So here we have a dilemma—motors on powerboats need oil and gas to run. It's easy to see that powerboaters hold a lot of polluting power in their hands when they pour oil and gas into their motors.

The telltale sign of oil and gas pollution is a rainbow sheen on the water's surface. The solution is to use funnels and extreme care when fueling and maintaining a motor while on the water. Do not top-off tanks. Use oil-absorbing pads in the bilge, and dispose of them properly when they are dirty.

Did you know?

On the Center for Marine Conservation's 1999 International Coastal Cleanup Day volunteers picked up more than 650 items of trash for every mile of beach covered.

Let's Go Surfing Now!

Learn what you can do for your waterways

EPA offers two web sites describing ways to protect waterways:

(1) Vessel Sewage Discharges (http://water.epa.gov/polwaste/vwd)

(2) Marine Debris Prevention (http://water.epa.gov/type/oceb/marinedebris)

Other clean boating web sites:

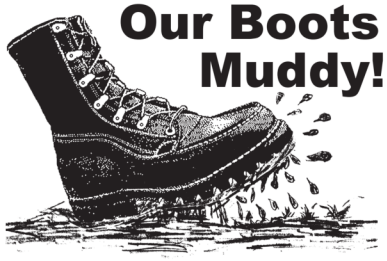
www.coastal.ca.gov/ccbn/ccbndx.html

www.boatus.com/cleanwater

http://water.epa.gov/polwaste/nps/marinas.cfm

www.cleanboating.org

Let's Get Our Boots Muddy!



Watch Your Wake!

Take two friends with you the next time you get into a boat or go jet skiing. While you drive, have one friend watch the wake produced by the watercraft while onboard and have another friend stand on shore and observe the height of the waves from your engine that actually reach the shoreline. The shorebound helper should also note any erosive effects of the waves or other disturbance along the shoreline (such as uprooting of aquatic plants). Compare notes and make the proper adjustments to the speed of the craft required to reduce wake damage. Use masking tape to mark the throttle where your craft produces the least wake.

A dirty hull is bad news. Unfortunately there are no spiffy-jiffy brushless boat wash businesses out on the water. You are left to your own devices. Wash it in the lake? Fagettabotit! Haul it out and wash it away—well away—from water. Try to use nonphosphate, biodegradable cleansers or just plain water. The chemicals contained in many boat cleaners can kill or harm fish and other aquatic creatures.

Water Sport Woes

Don't own a motorboat? Well, your personal watercraft (such as a Jet Ski) poses some of the same threats to the environment as the big boats. And because of their size, such watercraft have access to environmentally sensitive areas that are too small for access by larger boats. To make matters worse, some two-cycle engines can discharge up to 40 percent of their oil and gas into the water! The popularity of personal watercraft in vacation spots has even led to ordinances banning them. In Lake Tahoe, where they have been banned since June 1999, personal watercraft contributed to high levels of cancer-causing methyl tertiary-butyl ether (MTBE) in the lake. MTBE is a gasoline additive used as a lead substitute to reduce air pollution.

Wake from personal watercraft and boats also contributes to water quality degradation. Large waves produced by personal watercraft erode shorelines, disturb sensitive shoreline vegetation, and degrade fish and wildlife habitat. What can you do to watch your wake?

- Learn at what speed your boat or jet ski produces wake.
- Reduce your speed before you reach a speed marker, not after you pass it.
- Obey all posted speed limits.
- Operate your boat or watercraft only in appropriate water depths.
- Avoid cutting through seagrass beds.
- Operate your boat or watercraft so that no wake is created within 150 feet of the shore.

Career Corner

A *marine biologist* studies living organisms in water environments.

A *marine police officer* patrols our waterways to make sure the waterways are safe for people and wildlife.

A *boat mechanic* fixes boats and makes sure that they don't leak any chemicals that could pollute the water.