## Boat Winterizing Checklist (Boats with gasoline Inboard and stern drive engines)

- Replace engine oil. Moisture and acids in old oil will pit bearings and other engine parts while in storage. To drain oil warm up engine first so more of the dirty oil will drain out and impurities will flush out easier (do not run engine out of water). Use good quality oil and filters recommended by your engine manufacturer.
- Flush and drain cooling water. Flush engine with clean water. Use water muffs or similar device to connect garden hose to cooling system (never run water engine without water). Flush until engine reaches normal operating temperature. Next remove drain plugs from engine. Water must be drained out of the engine to prevent damage from expanding water when it freezes. Check your owner's manual for location of drain plugs. They are usually located in engine block and manifold. Sometimes the water pump hose also needs to come off to drain remaining water.
- Stabilize Fuel. Fuel can deteriorate in as little as 60 days causing gum and varnish build-up in engines resulting in hard starting, poor performance and reduced engine life. Add STA-BIL Fuel Stabilizer to fuel to prevent fuel deterioration. Then fill fuel tank. A full tank prevents water condensation from getting in tank and causing corrosion. Draining fuel does not prevent varnish formation in engines as fuel is left behind in the fuel system. Plus gaskets can dry out resulting in leaks in the spring. Run engine for a few minutes to get treated gas throughout system. Do not run the engine without cooling water. Either start the engine in the water or use a fitting designed to run the engine with a garden hose. If you use your boat infrequently, stabilize gas at each fill-up.
- Protect internal engine components. While in storage engine oil drains away leaving internal engine components exposed resulting in corrosion and metal to metal contact (cylinder scuffing) at start-up next spring. Spray STA-BIL Fogging Oil into air the intake with the engine running (never run engine without cooling water). STA-BIL Fogging Oil penetrates deep into the engine, coating parts with a protective layer of anticorrosive compound that also lubricates the piston at start up next spring preventing cylinder scuffing. Spray Fogging Oil for 10 seconds or until engine stalls.
- Replace gear oil. Drain the lower unit of old gear oil and replace with new. When changing gear oil check for moisture in the old oil. Water coming out first or milky or lumpy oil is indicative of moisture contamination and means you need new seals before next season.

- Grease and lubricate. Find grease fittings and service with a quality marine grease. Most fittings will be located in the steering mechanism area. Check your owner's manual for all areas to lubricate.
- Remove valuables. Boatyards receive little traffic in the winter making break-ins easy. Remove valuables like expensive electronics.
- Clean and wax.
- Cover. The best place to store your boat is in dry storage but this can be expensive. Next best would be to shrink wrap boat. At least cover boat with a durable cover.