

BOATING IN PENNSYLVANIA

PENNSYLVANIA FISH & BOAT COMMISSION (PFBC)

The mission of the Pennsylvania Fish & Boat Commission is to protect, conserve and enhance the Commonwealth's aquatic resources and provide fishing and boating opportunities. PFBC is responsible for promoting fishing and boating, and regulating and enforcing fishing and boating laws and regulations in Pennsylvania. Established in 1866, PFBC is primarily funded by Pennsylvania's boaters and anglers through boat registration fees and fishing license revenues.



PENNSYLVANIA'S BOATING OPPORTUNITIES

Pennsylvania provides nearly unlimited opportunities for the recreational boater. The Commonwealth has over 85,000 miles of rivers and streams ranging from headwaters to major river systems. It has 76 natural lakes that provide 5,266 acres of flat water. An additional 2,300 constructed impoundments provide another 200,000 acres of boatable waters. Lake Erie has 63 plus miles of shoreline and 735 square miles of waters within Pennsylvania's boundaries. The Delaware River provides 56 miles of tidal waters within Pennsylvania and access to the Atlantic Ocean.

The number of recreational boats on Pennsylvania waters continues to increase. In 1982, fewer than 200,000 boats were registered. In 2011, there were more than 332,000 registered boats. Over half of the registered boats in the Commonwealth are less than 16 feet in length. Pennsylvania is primarily a small-boat state. However, all kinds of boating are popular, from whitewater rafting on the Youghiogheny River to powerboating on the lower Delaware River.

PENNSYLVANIA WATER TRAILS

Pennsylvania Water Trails are boat routes suitable for canoes, kayaks and some motorized watercraft. Like conventional trails, water trails are recreational corridors between specific locations. Water trails are comprised of access points, boat launches, day use sites and, in some cases, overnight camping areas. From ripples to rapids, paddling these aquatic highways can be a great adventure. To view maps for the statewide network of water trails, visit www.fishandboat.com.



BOAT MOTORS AND HULL TYPES

MOTORS There are four primary types of boat motors:

- 1. Outboard motors** vary in size and clamp onto the transom. The whole motor pivots on its mounting to aim the wash and steer the boat. The boat turns in the opposite direction that the tiller arm is pushed. Electric motors are outboards.
- 2. Inboard/outboard (or sterndrive) motors** are bolted inboard, at the stern, with the drive unit through the transom.



- 3. Inboard motors** are mounted lower in the boat and farther forward than an inboard/outboard. A rudder is used to steer.
- 4. Jet motors** use an engine to pump water through a nozzle at the stern, which pivots to steer the boat.

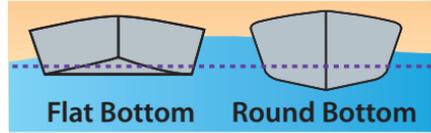
Many Pennsylvania lakes have specific motor-type and horsepower limitations.

BOAT HULL TYPES

There are two basic types of boat hulls:

1. **Planing hulls** are flat-bottomed and skim across the water.
2. **Displacement hulls** have round bottoms and plow through the water. They are more stable but not as fast as planing hull boats.

Most boats are a compromise between planing and displacement hulls (deep-V, modified-V, cathedral, etc.). There are also multiple-hulled boats such as catamarans and pontoons.



BOATING TERMINOLOGY

Aft- near or at the stern of the boat.

Beam- the width of a boat, also the direction at right angles to the centerline of a vessel.

Bilge- the lowest point of a boat's interior hull.

Bow- the forward part (toward the front) of a boat.

Draft- the vertical distance from the waterline to the lowest point of the keel; it is the minimum depth of water in which a vessel will float.

Forward- aboard a boat, the direction to the front, to the bow.

Freeboard- the vertical distance from the waterline to the gunwale.

Gunwale- the upper edge of the side of a boat.

Hull- the structural body of the boat; does not include superstructure, masts or rigging.

Keel- the main structural member of a boat; its backbone; the lateral area beneath the hull that helps to provide stability and reduce the sideways drift of a boat.

Life Jacket- also known as a personal flotation device, vest or preserver.

Port- looking toward the bow, the left side of the boat.

Starboard- looking toward the bow, the right side of the boat.

Stern- the aft (back or rear) portion of the boat.

Transom- the transverse part of the stern (where an outboard motor is attached).

Waterline- the intersection of a boat's hull and the water's surface.

USCG- United States Coast Guard

USPS- United States Power Squadrons

