

# Enterprise

by Bear Mountain Boat Shop

The Enterprise, featured in *Kayaks You Can Build* by Ted Moores and Greg Rossel, is Bear Mountain's first plywood kit and is based on the strip-built Endeavour kayak, with only a few subtle changes. The boat is designed for the novice to intermediate kayaker, which (for us) means comfortable stability, good tracking and easy cockpit entry. The intended use would be day trips or one-week camping excursions on lakes, rivers or coastal waters. The aft end of the profile has been deepened on this boat (which equates to less rocker aft) offering slightly enhanced tracking for less experienced paddlers. We believe in using a rudder when it makes sense, like on a long haul with quartering waves, so one is available as an option. The freeboard is the same as the Endeavour, but the angled deck-edge panel around the sheer adds almost an inch to the foot space.

—Ted Moores, president and builder, and Steve Killing, designer  
Bear Mountain Boat Shop

## REVIEWERS

JK: 5' 6", 140-pound male. Day paddles. Waves to 2 feet, winds to 15 mph. No cargo.

GL: 5' 11", 165-pound male. Day paddles. Waves to 1 foot, winds to 15 knots. 55 pounds of cargo.

TE: 6' 1", 200-pound male. Day paddle. Waves to 1 ½ feet, winds to 15 knots. No cargo.

Length overall	17' 5 ½"
Beam	24 ¾"
Volume	17.10 cu. ft.
Cockpit size	17" x 33 ½"
Cockpit coaming height	
Forward	13 ⅝"
Aft	11"
Height of seat	11 ⅛"
Weight	54 lbs.

## THE REVIEW

### First Glance

The Enterprise, a plywood kit kayak (supplied by the manufacturer as a finished kayak), has a multi-chined hull and a ridged deck with beveled sides. The planking and decking have curved butt joints that make the strakes self-aligning and preclude the need for butt blocks or for cutting scarf joints. "The hull and deck were fair and free of wobbles" (TE).

The Enterprise is light for a "fairly easy solo carry, but a bit bow-heavy" (GL). TE found it "easiest to carry the boat inverted over my head with the thigh-brace flanges resting on my shoulders." The deck rigging can be designed by the builder; the model tested had a perimeter grab line and bungees behind the seat for paddle-float reentry. The fittings were loops of webbing screwed to the deck. The end toggles were attached to lines threaded through holes in the "stems."

### Fit

The keyhole cockpit is "quite roomy" (JK), was "easy to get in seat first" (TE) and had "lots of room at the seat for paddlers with wide hips. It could accommodate a fairly large paddler. The coaming is a gorgeous finished plywood piece, shaped into a keyhole with a nice thin lip to secure the spray skirt—very well done" (GL). The interior had "plenty of room for size-13 boo-

ties. The high peaked foredeck had plenty of paddling clearance" (TE). The seat is mesh-covered foam. TE "felt a lot of pressure on my sit bones, and my leg went slightly numb after 30 minutes. It needs deeper contours." For JK "the seat was reasonably comfortable but didn't have much thigh support."

The back support is sewn to the seat and supported by an adjustable cord. GL "thought the back support 'gave' too much, but anchoring the seat with Velcro would probably solve that." "There was no thigh bracing in the demo kayak. The sloped deck made bracing a bit challenging" (JK), but "the keyhole coaming could be easily modified with foam for bomber thigh braces" (GL). The foot braces, standard locking pedals on aluminum tracks, are "very solid



# KAYAK REVIEWS

and easy to adjust with your feet" (TE). The Enterprise tested had no rudder, and GL "wouldn't add one, since the kayak is balanced well enough."

## Stability and Maneuverability

The initial stability was rated as "good" (JK), "moderate" (GL) and "very secure." I could sit broadside to the waves and feel comfortable with my hands off the paddle" (TE). The secondary stability was, respectively, "very strong," "high" and "excellent. It provides a very solid wall to lean on for edging. The kayak remained stable even as I got the coaming to the water." The Enterprise "tracks pretty well, with only the slightest yaw while underway" (GL). "On edge, it turns well, especially for a kayak of this length. It was not hard to edge a little to adjust course" (JK). "A quick sweep and a bit of edging, and it carved a sharp turn and continued carving when I stopped paddling. An extreme edge made for very tight turns" (TE).

## Speed

The Enterprise "will deliver a good turn of speed for a strong paddler" (GL). JK recorded 3.5 to 4 knots at a cruising pace, 5 knots at an exercise pace and sprinted to nearly 6 knots. For those same categories, TE listed 4.5, 5.5 and 6.25 knots. The Enterprise offers a dry ride. TE "punched through a couple of steep wave faces, and water was quickly shed before it got to the cockpit."

The Enterprise "seemed to weather-cock a little, but it was manageable with boat lean and corrective strokes" (JK). On wind waves it "accelerated quickly and easily caught rides. It didn't have much tendency to broach" (JK). "If

## BEST FEATURES

- Light weight
- Stability

## TO IMPROVE

- Seal of hatch

the Enterprise started to broach, I could edge it back on line. Its very good steering could correct for any errors on takeoff" (TE).

## Roll and Rescue

Wet exiting after a capsize "is easy. The thigh brace flanges don't obstruct the opening. Lifting the bow to drain the water and flipping the kayak upright is easily done with a lift of the bow. In spite of the lack of a forward bulkhead to restrict water, there wasn't much in the cockpit" (TE). GL agreed that the "cockpit drains readily of water with a single lift and pour from the bow." JK, however, found "there was a decent amount of water in the cockpit after a wet exit. The stability did not decrease much with the water on board. It took about two minutes of pumping to get most of the water out. I was able to scramble in without a paddle float. The high decks and freeboard make getting up on deck from the water more difficult; using a paddle float helped." It is "fairly easy to roll, but laybacks are not really an option—the rear deck is too high" (GL).

## Cruising

The Enterprise has stowage space for gear to go a week or more. "The rear hatch opening is large and the compart-



The Enterprise's hatch opening is large enough to make it easy to stow bulky gear.

ment deep, so you can get most long or bulky things in" (GL). The plywood bulkhead is glassed in and "located fairly close to the coaming to facilitate easy water removal" (GL). After rolling and wet-exit drills, a half-cup to a half-gallon was reported in the aft compartment. With a load of 55 lbs., "the kayak turned nicely and had lots of secondary stability. With 70 percent of the weight in the rear, the kayak trimmed to a near neutral helm" (GL).

## The Bottom Line

"The Enterprise will best suit medium to large paddlers. It is not too tippy for a beginner or too stable for an experienced paddler. It's ideal for a day-tripper or occasional camper" (JK). It is "great for photography, fishing and long trips, with reasonable weight, a huge carrying capacity, good turning and good tracking" (GL). "The Enterprise is an attractive, lightweight boat that could serve the needs of novices to advanced paddlers looking for a boat with good speed and maneuverability without a rudder" (TE).

## MANUFACTURER'S RESPONSE

Thank you for the opportunity to introduce the Enterprise plywood kayak kit to the paddling world. Steve Killing's design is intended to be a safe, comfortable and efficient kayak for the novice paddler, yet with room to grow as the paddler's skill level increases; we are pleased that your review team found the boat fit this slot. Also appreciated were the comments on aesthetics. We believe that our building method and kit will allow most anyone to build a professional-quality kayak the first time. Since the boat is owner built, there are many options available to the builder—choice of seats, rudder systems, thigh brace padding and even cockpit size can be varied to suit. Most builders will install a

forward hatch, and with it the forward bulkhead (both included in the kit) to keep the extra gear dry. Our hatches are sealed with a double heavy-duty industrial rubber gasket and held down with straps and low-profile wooden anchors (included in the kit). Before launching, we always check that the straps are tightened down securely and loosen them when the boat is not in use. While we think that the closing system is as watertight as possible, we will continue to monitor this feature.

—Ted Moores, president and builder  
Bear Mountain Boat Shop

**ENTERPRISE  
MANUFACTURING DATA**

**Designed:** 2005

**Standard construction:** Stitch-and-glue 4-mm marine-grade okoume plywood with 6 oz. fiberglass cloth and epoxy resin. Built over five building forms with integral stems. Hull is joined to the deck using a sheer clamp. Gunwales are protected with a hardwood guard.

**Optional construction:** Plywood hull with woodstrip deck

**Standard kit features:** *Kayaks You Can Build* user manual, computer-cut panels with pre-drilled alignment holes and self-aligning joints, bulkheads, full-length fiberglass cloth, pre-shaped cockpit rims and hatches with hardware and gasket, cradles, jigs and building forms, guards, sheer clamps and stems.

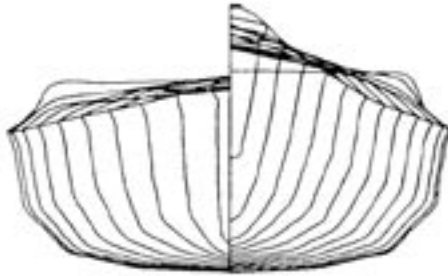
**Options:** Builder specified

**Weight:** (for model reviewed) 45 lbs.

**Price:** (for model reviewed) \$1,150 for kit

**Availability:** From the manufacturer. Check with manufacturer for distributors.

**Manufacturer:** Bear Mountain Boat Shop Inc., 877-392-8880 or 705-740-0470; info@bearmountainboats.com; www.bearmountainboats.com



**SPEED VS. RESISTANCE**

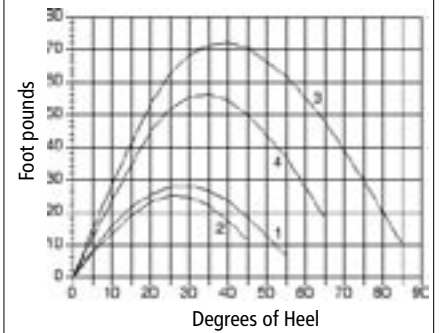
Resistance in pounds.

Speed	Winters/KAPER	Broze/Taylor
2 knots	1.00	1.06
3 knots	2.08	2.11
4 knots	3.71	3.86
4.5 knots	5.02	5.06
5 knots	7.12	7.18
6 knots	13.17	12.95

**HYDROSTATICS**

Waterline length	16' 2"
Waterline beam	23.4"
Draft	4.2"
Prismatic coefficient	0.54
Wetted surface in sq. ft.	23.76
Center of buoyancy (Hydrostatics calculated with 250-lb. load)	54%

**Righting/Heeling Moments (Fixed-weight)**



**Stability Curves**

- 1. 150 lb. paddler, no cargo
- 2. 200 lb. paddler, no cargo
- 3. 150 lb. paddler, 100 lb. cargo
- 4. 200 lb. paddler, 100 lb. cargo

**TECH TALK**

Readers interested in the full set of hydrostatics can find them posted on our website at [www.seakayakermag.com](http://www.seakayakermag.com) along with additional data. An explanation of the terms and procedures used in the kayak test program is also available on the site.