

## **NOAA Chesapeake Bay Interpretive Buoy System**

### **First Landing Buoy: Geography**

Welcome to NOAA's First Landing CBIBS Buoy, part of the Chesapeake Bay Interpretive Buoy System. Located at 36 degrees 58.76 minutes North latitude, 76 degrees 02.62 minutes West longitude, this buoy lies on a shoal in the Chesapeake's mouth, approximately halfway between the junction of the Thimble Shoals and Baltimore channels and east of the middle section of the Chesapeake Bay Bridge-Tunnel.

The First Landing buoy sits at the crossroads of the Chesapeake Bay and the Atlantic. Weather and water conditions at this intersection reflect the dynamic daily interplay of Earth's third-largest estuary and her second-largest ocean.

Over several thousand years, winds, tides, and powerful downstream currents from the Chesapeake's 64,000-square-mile watershed have shaped a complex assembly of channel edges and shoals. The pilings, islands, and rock-covered "tubes" of the Chesapeake Bay Bridge-Tunnel, in place since the mid-1960s, provide hard attachment surfaces for billions of marine shellfish like oysters, hooked mussels, limpets, and barnacles. These in turn have attracted complex living communities of blue and calico swimming crabs, multiple species of mud crabs, grass and sand shrimp, worms of all sizes, anemones, and many other creatures.

This combination of artificial and natural habitat occurs at the overlap in range of southern fish species like cobia, red drum, and spadefish with northern species like striped bass (rockfish), tautog, and black sea bass. Wider-ranging species like bluefish add to the mix. The rich waters also attract a broad variety of seabirds, from gannets, large gulls, and brown pelicans to tiny shorebirds and least terns that migrate along the Atlantic coast.

In this location, the First Landing CBIBS buoy anchors the lower end of the buoy system. It provides fascinating observations on both water quality and weather conditions, assisting many users from pilots handling large ships to anglers in small boats and even tourists driving across the Bridge-Tunnel.