



Facts about the DuPont Nature Center at Mispillion Harbor Reserve

The Center: The DuPont Nature Center at Mispillion Harbor Reserve is a \$2.1 million natural history interpretive center and wildlife observatory. The Delaware Department of Natural Resources and Environmental Control's Division of Fish and Wildlife operates the state-owned facility.

It is located at the edge of a harbor where the Mispillion River empties into the Delaware Bay. Each year, thousands of horseshoe crabs mate and lay millions of eggs on beaches visible from the DuPont Nature Center's observation deck.

The eggs are a key food source for the red knot, a remarkable migratory shore bird.

Exhibits and Features:

The center has an observation deck with a view of the harbor and nearby beaches; a tank containing live, juvenile horseshoe crabs; Delaware Bay natural history displays; an exhibit devoted to the history of the Mispillion Lighthouse; bird identification panels; shorebird exhibits; an interactive station, and monitors with live camera feeds from nearby breeding grounds.

Construction History:

As part of its ongoing effort to protect a habitat vital to both horseshoe crabs and red knots, DNREC purchased the ground on which the DuPont Nature Center now stands in 2004.

The 1.7-acre property included a waterfront restaurant building on wooden pilings and an outbuilding, since removed.

To date, the state has spent approximately \$1.6 million acquiring the land and transforming the former restaurant into a nature center.

DuPont's, Clear into the Future Delaware Estuary Initiative contributed \$500,000 in cash for interpretive displays and more than \$50,000 in labor and building materials for the center's renovation.

Lighthouse:

From 1873 until 2002, the Mispillion Lighthouse stood just a few feet south of where the nature center building now stands.

The lighthouse served as an active navigation beacon until 1929, when the steel tower to the west of the nature center took its place.

In May 2002, a lightning bolt struck and burned the lighthouse tower. A private party purchased the ruin and used it to build a replica, which can be seen today in Shipcarpenter Square in Lewes, Del.

The Delaware Estuary:

An estuary is place where a river empties into a sea or ocean.

The Delaware River Estuary runs from Trenton, N.J. to Cape Henlopen, Del. It includes the navigable portion of the Delaware River and all of the Delaware Bay.

More than 5 million people live in the Delaware River Estuary. Most are clustered around Philadelphia, Camden, N.J., Wilmington, Del. and Trenton, N.J.

The estuary is home to the world's largest freshwater port, the world's second-largest petrochemical port and some of the largest oil refineries in the United States.

But for all of its industry and commerce, the Delaware River Estuary is also a place of vibrant biological diversity. It boasts more than 130 species of fish, shellfish and crabs – as well as the world's largest population of spawning horseshoe crabs.

It is home to numerous species of waterfowl, and serves as a seasonal nesting ground for one of the largest concentrations of migrating shorebirds in the Americas

**Clear into
the Future:**

The nature center's grand opening marks the public launch of Clear into the Future, a DuPont initiative to enhance the beauty and integrity of the Delaware River Estuary for generations to come.

As a company founded on the Delaware River Estuary, DuPont recognizes its birthplace as a commercial and ecological treasure. Through Clear into the Future, DuPont hopes to demonstrate the value it places in its history on the estuary and in its commitment to a sustainable future.

Science and education are two pillars of Clear into the Future. The initiative has enlisted Professor Green, a robot who teaches children about the importance of estuary ecosystems. By year's end, "Professor G" will have visited about 60 elementary school assemblies in Delaware, New Jersey and Pennsylvania.

Clear into the Future also provides universities with research assistance and fellowships. It's helping University of Delaware researchers develop an alternative to horseshoe crabs, a bait used by eel and conch fishermen.

If successful, the alternative bait project will advance efforts to protect horseshoe crabs, migratory birds that feed on their eggs and the livelihoods of estuary fishermen.

In addition, Clear into the Future is coordinating a corps of DuPont volunteers to work on education and clean-up projects on the Delaware River Estuary.

As of June 2007, DuPont has invested more than \$1.5 million in Clear into the Future.

More information about Clear into the Future is available at www.clearintothefuture.com.

The Red Knot:

Red knots are some of the world's most tenacious travelers. Each spring, they take off from South America's southernmost cape and begin a 20,000-mile migration to the arctic.

That flight burns a lot of calories, and an estimated 30,000 red knots refuel midway by gorging on Delaware Bay horseshoe crab eggs. The birds arrive in the bay weighing about 100 grams. When they leave a few weeks later, they weigh about 220 grams.

They need every last gram. After completing their grueling journey, the red knots settle on frozen nesting grounds where late thaws can make insects hard to find. The birds can starve before spawning if they aren't fat enough to endure the lean weeks before arctic spring.

The red knot's life cycle provides a valuable lesson about how a local ecosystem can reach across time and distance. What happens between May and June in Delaware can have mortal consequences weeks later for thousands of birds nesting half-a-world away.

The Horseshoe Crab:

Horseshoe crabs aren't true crabs. They're actually chelicerates, eight-legged relatives of the extinct trilobite. Because they look much as they did millions of years ago – round greenish-brown shell, beady compound eyes, menacing tail spike – horseshoe crabs are often described as “living fossils.”

They can be found in various places around the globe, but more than 90 percent live in U.S. Mid-Atlantic coastal waters. Most spawn in the Delaware Bay.

Mature horseshoe crabs – about 10 years old – migrate from the ocean into the bay in late spring. During the May and June high tides, they crawl onto shore and mate.

Females then dig holes in the sand and deposit fertilized eggs in covered nests. A single female will lay nearly 90,000 eggs each spawning season.

Prime beach space on the Delaware Bay's coves and inlets is scarce for nesting females, and many will disturb other horseshoe crabs' eggs while digging their own nests.

Eggs exposed by competitive nesting provide a welcome and accessible food source for hungry red knots.

Horseshoe crabs live for about 16 years and can grow as large as 2.5 feet in diameter.

Nature Center**Hours:**

Hours of operation vary by season.

The nature center grounds will remain open until sundown. For information about the center and hours, please call 302-422-1329.

Directions:

The DuPont Nature Center
2992 Lighthouse Road
Milford, Delaware, 19963

The DuPont Nature Center is located at the mouth of the Mispillion River, just north of Slaughter Beach.

(Latitude: 38.9472; longitude: -75.3149)

Take Del. Route 1 to Highway 36 (Milford/Slaughter Beach exit) and drive east on 36 – also called Cedar Beach Road – toward Slaughter Beach. (That's a left if you're coming from the north and a right if you're coming from the south). Continue on Cedar Beach Road for 4.6 miles. Look for Lighthouse Road on your left.