Center for the Inland Bays

Inland Bays Journal

News from the Delaware Center for the Inland Bays

Hurricane Katrina Highlights Importance of Wetlands

By Ed Lewandowski
Executive Director, CIB

Friday, August 13th, 2004… A "bad luck" day if ever there was one. Packing sustained winds of 145 mph, Hurricane Charley roared ashore on Florida's west coast with an unprecedented 20 foot storm surge. The coastal and low-lying areas in the Sarasota, Port Charlotte, Tampa and St. Petersburg were devastated. For only the second time ever, Disney's theme parks closed their gates as the hurricane made its way across the peninsula.

Sunday, September 5th, 2004… After leaving the airport at Freeport, Grand Bahama under 6 to 8 feet of water, the center of the broad eye of Hurricane Frances passed over eastern Florida near Seawall's Point, Port Saint Lucie, Stuart, Jensen Beach and Port Salerno. The large Vehicle Assembly Building at the Kennedy Space Center was heavily damaged by the storm, which ripped off over a thousand 4-by-10 foot aluminum panels used to clad the building.

Thursday, September 16th, 2004… Spawned two weeks earlier east of the Lesser Antilles, Hurricane Ivan made landfall on the east side of Mobile Bay, just west of Gulf Shores, Alabama. Maximum wind estimated by the weather service was 130 mph. A last minute jog to the east

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Inland Bays salt marsh.

"I think the environment should be put in the category of our national security. Defense of our resources is just as important as defense abroad. Otherwise, what is there to defend?"

- Robert Redford,
Yosemite National Park dedication, 1985

Dispatches From New Orleans

From Kerry St. Pe', Director of the Barataria-Terrebonne National Estuary Program:

"If we, as a unique people, are to survive this hardship, we must restore our wetlands, our natural live oak covered ridges and our barrier islands at the same time we rebuild hurricane protection systems, roads, and homes. We can not have one without the other. We are co-dependant."

"Our connection to our wetlands is too strong for us to be content elsewhere. Our way of life was born out of these wetlands, and we have maintained that connection. These wetlands are the clothing around our communities. They protect our homes and they are symbols as well as the source of who we are."

"These are the images that are very hard for me to see. It is hard to see the place that I love, the place that the BTNEP was designed to preserve and restore, in this condition. It is not supposed to be like this near the end of an entire career and life spent trying to save this wonderful place..."

Too Many Deer Threaten Deer Health and Inland Bays Habitat

By E.J. Chalabala
and Joshua Thompson

Deer are incredibly beautiful animals; few can resist stopping their cars for a longer look when a doe is out grazing in a soybean field with her twin fawns in the late summer evening. How could someone ruin this picture of serenity, one must wonder, by killing one of these wonderful creatures? This question is asked, time and again, by people who insist that the deer aren't hurting anyone- "Why can't we just leave them alone?"

It's Really All About the Biology!!!

In a purely natural setting, unaltered by mankind, a deer population is limited by the available food and by the predator population. Deer are a prey species and rely on the predator just as much as the predator relies on the prey. A fine balance is stricken as the two populations oscillate back and forth and keep each other in check. In addition, the limited food supply prevents prey population levels from creeping above the landscape's carrying capacity.

Whitetail deer are considered to be an "edge habitat species," meaning that they thrive in broken, diverse habitat which provides shelter and food. *Man has essentially created an ideal situation for deer populations to thrive, through opening up the woods and creating endless edge habitat, and through providing a virtually limitless food source in modern agricultural fields.*

At the same time we have eliminated all apex predators that were once native to the area. While this recipe does increase deer watching opportunities, it spells disaster for the deer themselves.

As the population spirals above the landscape's natural carrying capacity and density per square mile increases, opportunity for disease outbreaks grows exponentially. Most deer diseases, such as chronic wasting disease, epizootic hemorrhagic disease, and blue tongue, rely on unnaturally high densities to thrive.

In addition, many high density deer herds in agricultural areas experience a seasonal "crash" after seasonal crops are harvested and the summer foliage is gone. Suddenly, an inflated deer population must rely on the natural forage available, which quickly becomes over-taxed.

In non-agricultural areas, deer herds, unexposed to predators, place a tremendous load on the natural habitat year round, and are perpetually malnourished, often, on the brink of starvation. It is exactly this type of situation which invites catastrophic disease losses.

Killer Deer???

The situation described above is detrimental not only to the deer, but also to many other game and non-game species that are reliant on many of the same resources. When deer over-browse a forest, all edible plant material is stripped below the browse line (averaging about 150 cm or 4.9 ft above the forest floor).

The forests appear green and healthy to a casual observer, but exist in an extremely altered and unhealthy state. Multi-storied, diverse vegetation structure has been replaced by a few species that are resistant to heavy browsing or are not palatable to deer, such as hay scented fern and striped maple.

Many of the native wildflowers and plants that live on the forest floor have been replaced by non-native species, and tree regeneration is non-existent, as the seedlings of oak and other valuable tree species are preferred deer food sources.

The average whitetail doe consumes approximately five pounds of forage each day, which equates to about a ton of forage each year. If a particular parcel is twenty deer above the natural carrying capacity, that's 36,500 lbs of mostly native food and cover that's eliminated from our delicate ecosystems.

In addition to green foliage, deer voraciously consume soft masts such as berries, fruits, and mushrooms, as well as hard masts which include acorns and other nut crops.

The Human Predator

Prior to man's inhabitance of the Delmarva Peninsula, large predators were abundant and likely included bears, coyotes, cougars, and wolves. Man's relentless attempts at elimination of these species in combination with habitat fragmentation has left an ecosystem devoid of any apex predators capable of keeping a balance in the area's deer herds.

How, then, can we hope to achieve a deer density that is at or below the healthy carrying capacity? Let us not forget that humans are indeed a part of the ecosystem and food web. We compete with and consume other organisms just like all of the other species with which we co-inhabit this

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