

A gem in the sea

By Jane Fasullo*

If you were to define “a gem in the sea”, what words would you use? Beautiful beaches? Sandy shores? Rocky shoals? Undisturbed? Full of rare and endangered plants and birds? Containing fresh water?



Well, those things and more exist on a tiny island of 843 acres less than a mile from the tip of the North Fork of Long Island. Shaped like a loin lamb chop approximately 3 miles long and 1 mile wide at its widest, it is separated from the mainland by a waterway called “the gut” where salt water rushes between the Long Island Sound and a combination of Gardiners Bay and Block Island Sound as the tides change. The name the European settlers gave the island comes from the abundant, fruit bearing, beach-side shrubs found there, beach plums, hence, Plum Island.

This island with all its valuable assets, is in trouble. It may have to be sold to the highest bidder. But first, more information about the island that explains why that would be a very, very bad idea.

If you’ve read the book *Plum Island* or heard about Plum Island by word of mouth, you probably don’t think of it as an environmental gem. You are more likely to think of it as a place from which distorted animals or animal diseases (like Lyme disease) originate. But you’ve been misled. The book *Plum Island* is fiction as are many non-scientific articles written about the island. In reality, the island has a long and varied history.

In reality, “A team of researchers led by the Yale School of Public Health has found that the Lyme disease bacterium is ancient in North America, circulating silently in forests for at least 60,000 years—long before the disease was first described in Lyme, Connecticut, in 1976 and long before the arrival of humans.”¹ The 2010 autopsy of Ötzi the Iceman, a 5,300-year-old mummy, revealed the presence of the DNA sequence of *Borrelia burgdorferi* making him the earliest known human with Lyme disease.² In Scotland in 1764, one of the first, if not the first, detailed description of what is now known as Lyme disease appeared in the writings of John Walker after a visit to the Island of Jura (Deer Island) off the west coast of Scotland. He gives a good description both of the symptoms of Lyme disease (with “exquisite pain [in] the interior parts of the limbs”) and of the tick vector itself.³ And in Breslau, Germany in 1883, physician Alfred Buchwald described a degenerative skin disorder now known as ACA (acrodermatitis chronica atrophicans) with the earmarks of Lyme Disease.⁴

Plum Island, in modern times, was used by Native Americans for farming and as a hunting ground until 1659m when it was sold by the then-ruling Indian Chieftain of Long Island to the son of a Connecticut governor. Following that, more than 20 families owned and used the island for farming and as a source of seafood. In 1827 a lighthouse was constructed at the northwest corner to help sailors navigate through the “gut”. But in 1869 the lighthouse had to be replaced by the one that stands there today.

In 1897, the U.S. Army established a Coast Artillery post on the island which was known as [Fort Terry](#). At the time of the Spanish-American war (April 21, 1898 – August 13, 1898) the fort was insufficiently armed to be of much use, but, thankfully, there was no need for it. The rest of the island was turned over to the federal government in 1901. During [World War II](#) (September 1939 – September 1945), the Fort was activated as an anti-submarine base and deactivated after World War II. Remnants of bunkers and other fortifications are still to be seen as are many of the buildings used by the officers and troops. In 1954, because of its proximity to ports of entry and the ability to closely guard it, the [United States Department of Agriculture](#) (USDA) established the [Plum Island Animal Disease Center](#) (PIADC) on the island. The Center conducts research on animal [pathogens](#) (especially those of symptomatic animals arriving to the United States from foreign countries), to protect farmers, ranchers, and the national food supply. Because of the nature of the research, access to the Island and the research facility has been restricted for the past 65 years. To learn more about its history, read the book "[A World Unto Itself: The Remarkable History of Plum Island, New York](#)". It was published in September 2014 by the [Southold Historical Society](#).

Due to its isolation and being heavily guarded for the past 65 years, and the confinement of most human activities to the northwest section of the island, Plum Island has become a place where many air, land and aquatic species thrive. More than 220 bird species which is almost 25% of all the bird species found in North America, have been recorded on Plum Island. The eastern end of the island serves as an important seal haul out site (where seals haul themselves out of the water onto rocks to rest) for harbor and some grey seals, involving several hundred animals providing for one of the largest seal congregations in southern New England.

Moreover, several species of state and federally endangered and threatened bird species such as the piping plover and roseate tern occur on the island with plovers nesting on the island's beaches. With regard to the island's flora, state ecologists and botanists have discovered more than 18 rare plant species, a few of which are found nowhere else in New York, and delineated several rare natural communities including a rare maritime dune community. As if that isn't enough, off the shores of Plum Island lay some of the Northeast healthiest beds of sea kelp.

So, this island is a gem not only for its beauty but also for its social, economic, scientific, military and environmental history and importance for the future.

But there is trouble in this paradise.

As a result of the attacks on the United States on September 11, 2001, security on the island was heightened, and in 2003, the [United States Department of Homeland Security](#) (DHS) assumed total ownership of the Island and all its facilities. In spite of the change in ownership, the United States Department of Agriculture (USDA) continued its science mission at PIADC with the DHS in charge of the safety and security of the operation of the facility.

In September 2008, the U.S. Congress passed, and President [George W. Bush](#) signed, [Public Law 110-329](#) (Sec. 540 - New York), part of the [Consolidated Security, Disaster Assistance, and Continuing Appropriations Act, 2009](#). It directed that, if a newer, bigger and more updated [National Bio and Agro-Defense Facility](#) (NBAF) were to be built somewhere other than on Plum Island, the [General Services Administration](#) (GSA) would close the Plum Island Animal Disease Center (PIADC) and sell Plum Island at a public sale (auction) to raise money for the new facility.

In January 2009, the [United States Department of Homeland Security](#) (DHS) rejected Plum Island as the location for the new, updated, NBAF research facility and instead chose the City of [Manhattan, Kansas](#). It was also decided to relocate the PIADC there.

Based on this decision, the United States Government prepared an [Environmental Impact Statement](#) (EIS) for the sale Island, and on August 29, 2013, the [United States General Services Administration](#) (GSA), the [United States Department of Homeland Security](#) (DHS) and the USDA announced a final "Record of Decision" (ROD) which determined that the entirety of Plum Island be sold to the private sector. IN the intervening years, all the funds necessary to build the new facility have been allocated and the lab in Kansas is near completion. Yet the law to sell Plum Island and a subsequent one in 2012 to use the proceeds for DHS headquarters needs, remain on the books. The island remains "for sale".

Since the first announcement of the decision to sell the island in 2009, a broad-based coalition of conservation, environmental, and civic organizations from both New York and Connecticut has been growing and working to preserve Plum Island for the [public trust](#). The coalition, referred to as the Preserve Plum Island Coalition (PPIC) of more than 110 entities, including Sierra Club (both the Long Island and the New York City groups), is coordinated by Save The Sound, a permanent program of [Connecticut Fund for the Environment](#). [Save the Sound](#), Peconic Baykeeper, Group for the East End, and three individuals sued the Department of Homeland Security (DHS) and the General Services Administration (GSA) in 2016 on several causes, including inadequate preparation of the EIS, ignoring the Endangered Species Act, and a lack of consideration of and adherence to the Coastal Zone management Act. Although the government moved to have the case dismissed, in January 2018, Judge Denis R. Hurley, Senior District Judge of the U.S. District Court, Eastern District of New York, denied the motion and allowed the case to proceed. Subsequently in August last year (2018), a notice in the Federal Register announced that a Supplemental Environmental Impact Statement (SEIS) would be prepared. Public scoping for the new document has not yet proceeded.

The PPIC is working with representatives in the U.S. House of Representatives and in the U.S. Senate toward generating and passing legislation that would repeal the mandate to sell Plum Island. The coalition also aims to convince New York State to take over stewardship of Plum Island's natural and historic resources. The Nature Conservancy (also a PPIC member) and Dave the Sound are working with the public and government to prepare a transfer and reuse plan in a combined effort called *Envision Plum Island*, due late this year.

Any organization that believes in the mission of saving the majority of Plum Island for conservation purposes may join the Coalition.

For more information visit <https://www.preserveplumisland.org/>.

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1 - <https://publichealth.yale.edu/article.aspx?id=15651> published August 28, 2017 and from the "history" section of https://en.wikipedia.org/wiki/Lyme_disease

2 – Hall, Stephen S (November 2011). "[Iceman Autopsy](#)". *National Geographic*. [Archived](#) from the original on 19 October 2011. Retrieved 17 October 2011.

3 - [^](#) Summerton N (1995). "Lyme disease in the eighteenth century". *BMJ*. **311** (7018): 1478.
[doi:10.1136/bmj.311.7018.1478](https://doi.org/10.1136/bmj.311.7018.1478).

4 - information extracted from Wikipedia and confirmed by current members of the Southold Historical Society. A video created by the Bay Area Lyme disease Center in California confirming this information can be found at

<https://www.bing.com/videos/search?q=history+of+lyme+disease&view=detail&mid=61B884463D6082D3C75F61B884463D6082D3C75F&FORM=VIRE>