Columbus Landed Somewhere Else, Maybe

by John Noble Wilford (October 9, 1986, p. 1)

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Attacking a centuries-old mystery, a team of researchers used computers and a new analysis of key documents to conclude that Columbus did not make his first landing in the New World where most historians had thought he did.

The historic landfall probably occurred 65 miles away at a small, remote island in the Bahamas, Samana Cay, According to new findings announced today by the late Harvard historian Samuel Eliot Morison, that the first landing took place at another Bahamian island, San Salvador. Rather than resolve the landfall issue, however, many scholars expect the new hypothesis to revive spirited debate on this and the many other unanswered questions surrounding the voyage of discovery nearly 500 years ago.

A 5-Year Investigation

Samana Cay, a narrow, nine-mile-long island with no per- manent inhabitants, was identified as the most probably landing site after a five-year investigation conducted for the Geographic Society by historians, archeologists, navigators, cartographers and other experts. Results of the study, which included a new translation of Columbus's log, a recalculation of his trans- Atlantic route and the discovery of the apparent length of the 15th-century Spanish units of nautical measurement, will be published in the November issue of National Geographic Magazine.

At a news conference, Joseph Judge, a senior associate editor of the magazine who directed the landfall investigation, said: "We believe we have solved, after five centuries, one of the grandest of all geographic mysteries. We think we have demonstrated conclusively that this matter is finally settled. Most of the history books are wrong."

On a visit to Samana, Mr. Judge said he found the island "just as Columbus described it." It is flat and green and has "many waters," as Columbus said of its many lagoons and lakes.

Charles Hoffman, an associate professor of anthropology at Northern Arizona University, chief archeologist on the landfall project, said he had uncovered several pieces of pottery and other artifacts indicating that the island was inhabited at the time of discovery, as Columbus reported. The inhabitants were the Arawaks, a people Columbus called Indians because he believed he had reached outlying islands of Asia, or the Indies, as they were known then.

If Samana was indeed the place where Columbus set foot in the New World on October 12, 1492, scholars said it served as further proof that he was an incredible seaman. The island is surrounded by treacherous reefs and the inshore waters are mined with coral heads. It would have taken considerable skill, they said, for him to have safely navigated its coastal waters and come ashore.

But over the years scholars have advanced arguments in favor of no fewer than eight other islands along a 400-mile arc in the Bahamas and to the south as the sites of Columbus's first

land- fall. Besides San Salvador, named Watling until 1926, the candidate islands were Egg, Cat, Conception, Plana Cays, Mayaguana, Grand Turk and East Caicos. Samana Cay was first advocated in 1882 by Gustavus V. Fox, who had been Abraham Lincoln's Assistant Secretary of the Navy. But his calculation were discounted by authorities, then completely ignored.

Evidence Sways Expert

At least one expert on the landfall question said he had changed his mind as a result of the National Geographic study. Robert H. Fuson, professor emeritus of geography at the Univer- sity of South Florida in Tampa, said: "I'm converted. I'm the only expert to change my mind three times, from Caicos to Grand Turk and now to Samana."

Dr. Fuson said the discovery of the true value of a Spanish sea league was one of the most valuable contributions of the investigation and should help clarify many other problems in interpreting accounts of the Age of Discovery. A search of 16th- century navigation manuals showed that the sea league, which was previously thought to be equal to 3.18 nautical miles, was actually 2.82 nautical miles. A nautical mile is 1.15 as long as the 5,280-foot statute mile.

Arne Molander, an aerospace engineer who has studied the landfall problem for three decades, said, "Samana was a somewhat better fit than Morison made for San Salvador." But he said he still believed Columbus sailed more closely along the 26-degree latitude and thus landed at Egg Island in the northern Bahamas.

Dr. Hoffman, the archeologist, who previously reported artifacts on San Salvador indicating it could be the site, said: "The only area I think there may be a problem is on the island of Samana itself. San Salvador looks more like the island Columbus described."

Beginning in 1981, Mr. Judge enlisted several experts to try to solve the landfall problem. Eugene Lyon, research director of the St. Augustine Foundation in Florida, an authority on old Spanish scripts, made a new translation of the Columbus log for Oct. 10 to Oct. 27, which was used to interpret the explorer's movement around the first island and his route through the Bahamas to Cuba.

Then Luis Marden, a former National Geographic editor and experienced trans-Atlantic sailor, plotted Columbus's 33-day, 3,000-mile voyage across the ocean from the CAnary Islands, using the daily navigation entries in the ship's log. Mr. Marden said he discovered to his surprise that previous calculations had not accounted for the effect of currents and leeway, the slow down-wind drift of a ship.

To reach San Salvador, or Watling, Mr. Marden said, Columbus "would have had to travel a nearly straight line, as traced on the seabed, between departure and landfall." Steering by compass alone, with almost no astronomical checks, as Columbus did, it is "a physical impossibility" to sail such a straight line, Mr. Marden said.

Mr. Marden used computers, the new knowledge of the length of a Spanish sea league and estimates of current and leeway, provided by navigation experts, to calculate that Columbus's course took him to a point about 10 miles east-northeast of Samana.

Another link in the chain of evidence pointing to Samana, Mr. Judge said, came from a computer analysis of where Columbus sailed the Ni$a, Pinta and Santa Mar!a after the initial land- fall.

Computer programmers at the Control Data Corporation converted a map of the Bahamas to electronic data so that any number of possible routes, suggested by various interpretations of Columbus's log, could be "sailed" electronically and instan- taneously.

The researchers found one place where two of Columbus's bearing cross. It is at a point about 20 miles southeast of cape Verde, on the southern tip of Long Island in the Bahamas, which Columbus had named Fernandina. Working back from the "Cape Verde fix" with the computer, Mr. Judge reported, took the route to the southern shore of Samana.

Thus, according to the new findings, Columbus first came upon Samana Cay, 65 miles southeast of San Salvador, and then sailed to Crooked Island, Long Island, Fortune Island, the Ragged Islands and finally to Cuba. Mr. Judge said the only "gap" in the theory is at Fortune Island. Columbus described it as 12 leagues long, but it is only 12 miles long. Some experts sug- gested that there might have been an error in the log's tran- scription. The original log was lost soon after Columbus's return to Spain.

Mr. Judge conceded that the new calculations would not end the controversy over where Columbus landed. "History grows," he said. "This will go on forever. It should go on forever."