

<b><i>Wickstrom</i> Ship</b>	<b>Sirotkin Artificial Reef Site</b>	<b>Deployed January 21, 2003</b>
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**Project Dates:** January 21 & 31, and May 30, 2003

**From:** Kerry Dillon

**Subject:** Post deployment assessment report for the “Wickstrom “ formerly “Lady Lora”

**Location:** Approximately 10 miles offshore Martin County, Florida

**GPS coordinates** N27 13.492/ W80 00.318

**Crewmembers:** Capt. Leon Morrison, Kerry Dillon, Wayne Turner, Randal Bazemore and Jack Glanville, (May 30 Lee Harris, Scott Glover, and Kerry Dillon)

The following is a field report to document as found conditions on the recently deployed “Wickstrom” in the Sirotkin reefsite offshore Martin County, Florida. The report addresses four types of data collected: Fish species identification, benthic species identification, ship stability, and ship orientation.

### **HISTORY OF THE “WICKSTROM REEF”**

The Wickstrom was previously known as the Lady Lora, Tauros, and US Army FS 553. The ship is a 168-ft. long coastal freighter that had been sitting idle in the Miami River for about 4 years. A cooperative union of many groups made the acquisition, transport, and deployment possible beginning in the spring of 2002. Some of those groups include: Martin County’s Engineering Department, Florida Sportsman Magazine, Martin County Anglers Club, Florida Oceanographic Society (FOS), McCulley Marine Services, Jones Shipyard, and the FOS Reef Research Dive Team.

The vessel was purchased from Jones shipyard in Miami, Florida with funds from Karl Wickstrom, the founder and chief editor of Florida Sportsman magazine, and the Martin County Anglers Club. Martin County funded the transport, administrative and deployment costs of the project.

On Tuesday January 21, 2003 the “Wickstrom” was intentionally sunk in 188 feet of water in the northeast quadrant of the Sirotkin artificial reefsite. The ship was deployed resting perfectly upright located approximately 400 feet north of the previously sunk “Tree Barge”.

### **SHIP ORIENTATION:**

The “Wickstrom” settled upright with the deck level and no noticeable listing. The bow faces southerly at 190° and the stern faces northerly at 10°. Some minimal scouring of the sand/shell bottom has occurred on the East Side. Water depths were from 186 -189 feet surrounding the ship at the sand/shell bottom.

The following depths were noted on the ship:

Top of masthead above bridge – 117 feet depth

Top of wheelhouse – 138 feet depth

Deck level at bow – 155 feet depth

Deck level at stern – 162 feet depth

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**ARTIFICIAL REEF STABILITY:**

During deployment the ship had a list to portside for several hours as the ship was flooded, but as it submerged completely it righted itself and sank level. During the underwater inspection, it appeared that the ship hit the bottom with great force. This force was enough to break steel welds along the portside at deck level where the railing and barrier wall exist and bend the wall to the east. Also at the bottom on the east (port) side, the hull steel plates have buckled slightly where the ship hit the sand/shell bottom. It appears the keel is about 4 – 5 feet into the bottom and level. With this type of landing and support along the keel the ship appears to be in a good stable condition.

**FISH SPECIES & ABUNDANCE FINDINGS:**

Fish identification and abundance were determined utilizing the guidelines setup by the Reef Environmental Education Foundation, known as *REEF*. The roving diver method was used. The divers swim around the reef site and identify species and record data on underwater slates. Data is double-checked topside using field texts with color photographs and then transferred to the *REEF* data sheets to be added to their worldwide database. Underwater video photodocumentation was also utilized to accurately document fish species and abundance. Below are the results of those findings:

<b><u>Marine species identified</u></b>	<b><u>Quantity estimated</u></b>	<b><u>Juvenile or Adult</u></b>
Greater amberjack	100	A
Lessor amberjack	50	A
Spadefish	20	A
Barracuda	5	A
Loggerhead sea turtle	1	A
Red Snapper	2	A

The limited number of species listed is due to the survey performed only 10 days after reef deployment.

**BENTHIC SPECIES IDENTIFICATION:**

As this is a new shipwreck no new benthic growth was noticeable. However a thick layer of barnacles exists on the hull below what was the previous waterline, due to the time that the ship sat idle in the Miami River. These will act as seeds for other benthic growth to occur. Some spadefish were observed nipping at some of this growth.