GREAT BAY AND SOUND SCALLOP SEARCH RESULTS

UF UNIVERSITY of FLORIDA
IFAS Extension
Charlotte County

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A total of 114 volunteer scientists participated in a scallop search in Lemon Bay and Gasparilla Sound on September 12, 2009. The goal was to document scallop populations using standardized methods that would allow for comparison from year-to-year and site-to-site. In order to accomplish this, the entire study area was divided into one nautical mile square grids and each group assigned to a numbered grid. Thirty-three groups total went out and thirty-one grids were sampled.

In each grid, volunteers looked for seagrass beds in which to conduct their surveys. Within the seagrass bed, they deployed a 50 meter transect (line with weights and floats attached). They then snorkeled the length of the transect looking one meter on each side of the line, counting live scallops along the way. Volunteers recorded transect location, scallop counts, seagrass type and density, and other pertinent information on data sheets. Depending upon location, volunteers completed two-to-four transects in their assigned grids.

Volunteers surveyed 111 transects total during the event and documented 94 scallops. Although 94 seems like a small number, there are a couple of important things to consider. First, the scallop populations in our area collapsed about 30 years ago, so the fact that we are seeing scallops even in small numbers returning on their own is a positive sign. Secondly, the search is not designed to capture all

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the scallops in the water, just those found along the narrowly defined transect.

Obviously we are not seeing scallop populations at sustainable levels but hopefully someday we will. The first step in knowing if we are experiencing gains or losses in scallop populations is to know what we have and what we had. A lot of people have reported seeing more scallops in our local waters this year. Bobbi Rogers from Charlotte Harbor Environmental Center (CHEC) commented to me that this was the first year she ever remembers getting live scallops in seine nets during her wading trips at Cedar Point Park. The Great Bay and Sound Scallop Search was a way to assess scallop populations in a scientific way.

By using standardized methods there is important information that can be gleaned from the data. For instance, when looking at the mean (average) number of scallops per 100 meters square for the grids sampled (total number of scallops counted, divided by total meters square sampled, multiplied by 100 meters) we find just under one scallop per 100 meters square (0.925/m.sq.). Looking at the water bodies separately we see there was very little difference in overall scallop densities between Lemon Bay (0.935/100m.sq.) and Gasparilla Sound (0.918/100m.sq.). Coral Creek even weighed in similar with a mean density of 0.917/100m.sq.). But, within the study area there were areas where scallop densities were higher than others. Mean densities of each grid sampled showed higher densities north and south of Stump Pass but not at the pass itself. Although not as obvious from the mean grid data, when looking at individual transect data, the same trend was seen around Little Gasparilla Pass. Densities in Gasparilla Sound were variable.

The Florida Fish and Wildlife Conservation Commission collects scallop information around the state annually using similar but much expanded sampling methods. They sample in Pine Island Sound, Sarasota Bay and Tampa Bay, but due to resource constraints, they cannot cover every water body. This year's scallop search was an important step towards establishing a baseline conditions in our local waters. The data provides important management information for scientists where no data existed. It also allows citizens to be a part of scientific process.

The Great Bay and Sound Scallop Search compliments similar citizen volunteer scallop surveys in Sarasota and Tampa Bay. Taken together these surveys indicate restoration of bay scallop populations may one day become a reality. What about next year? Plans are to conduct these surveys on an annual basis. Scallops only live 12-18 months and only through a long term survey effort will we be able to truly determine if scallops will permanently return.

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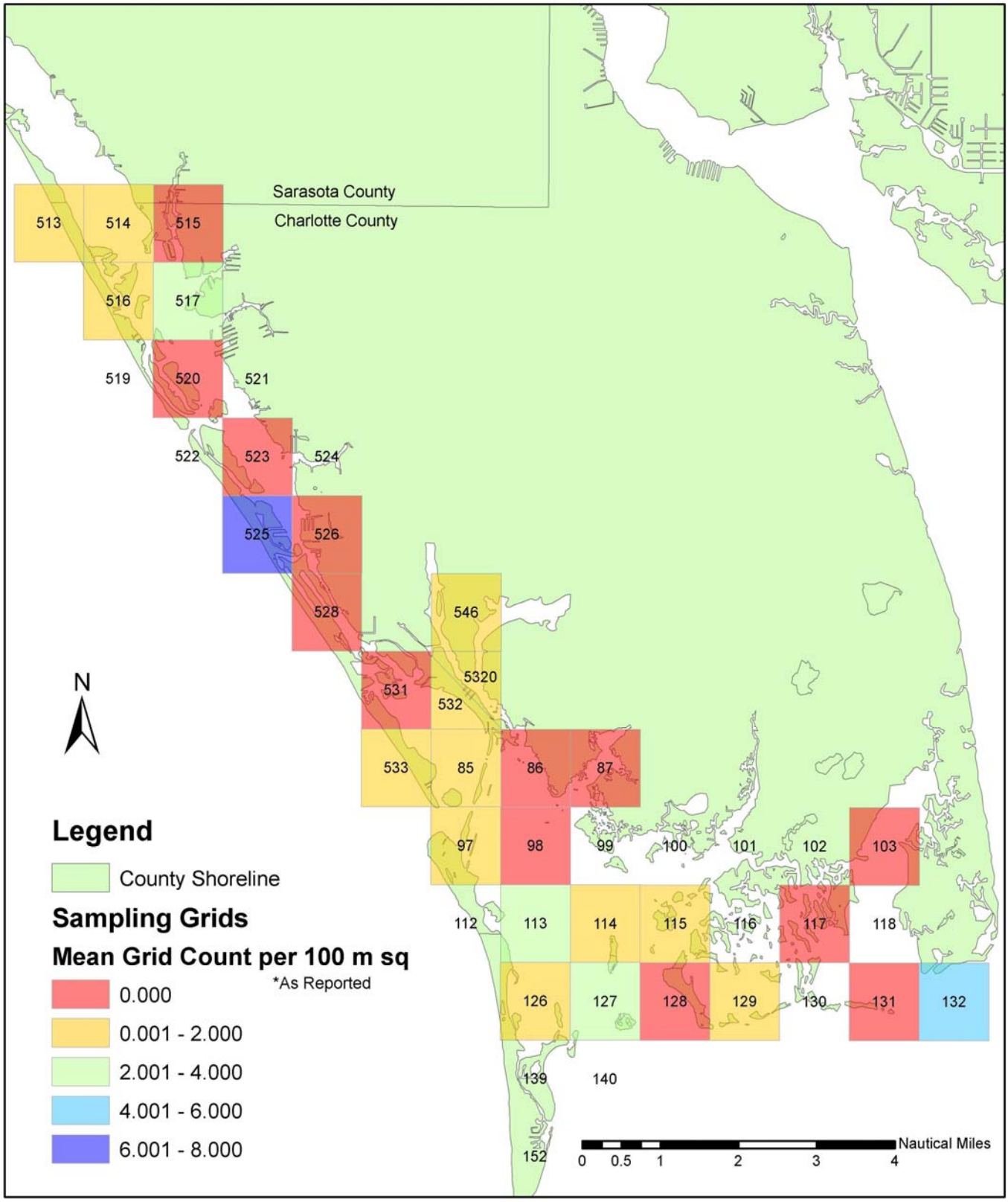
2009 Great Bay & Sound Scallop Search
Mean Number of Scallops per 100 Meter Square by Grid



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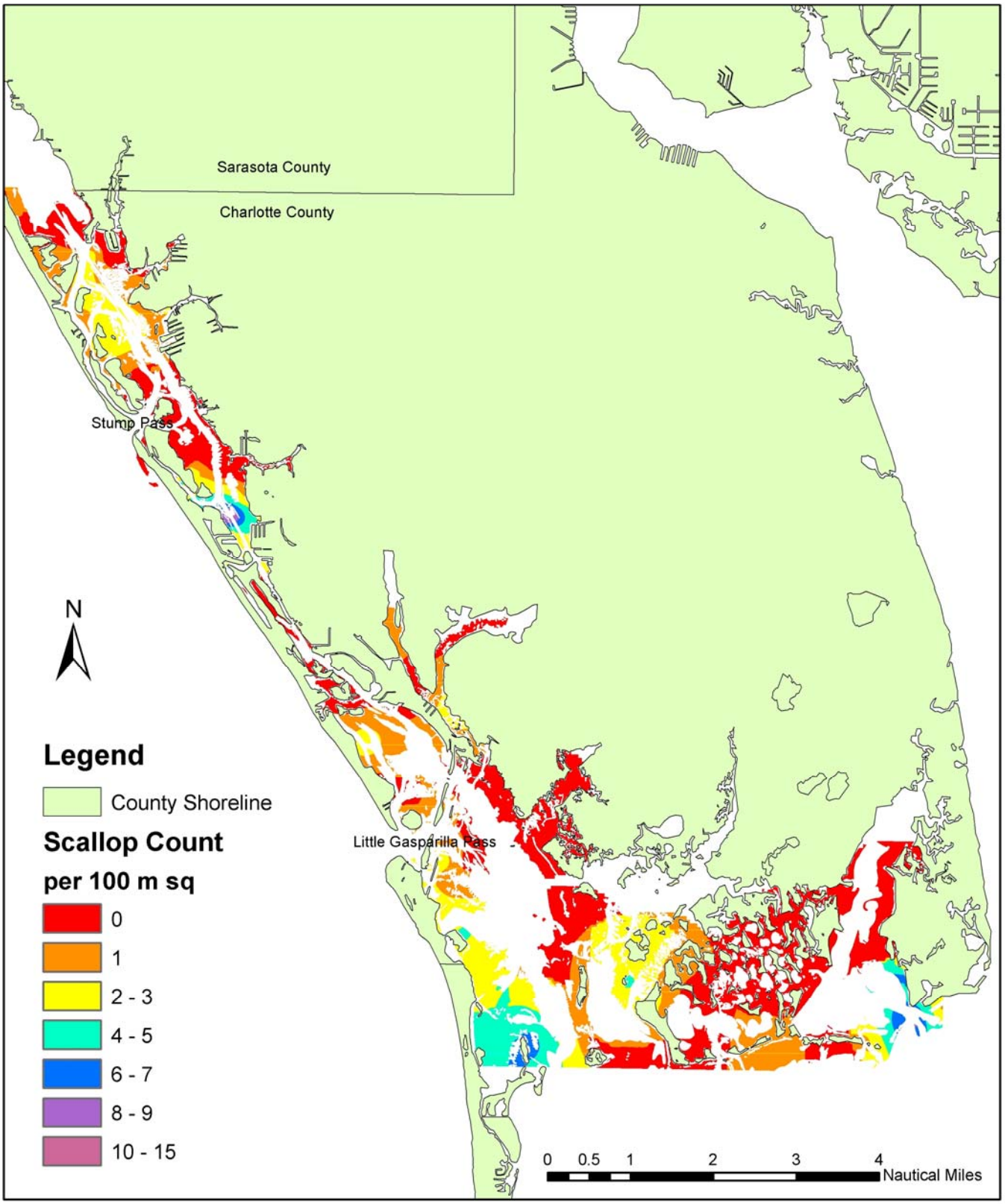
2009 Great Bay & Sound Scallop Search
Interpolated Number of Scallops per 100 Meter Square Transect



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