South Carolina
update for St. Pete GSARP meeting
October 2010

DNR

lionfish

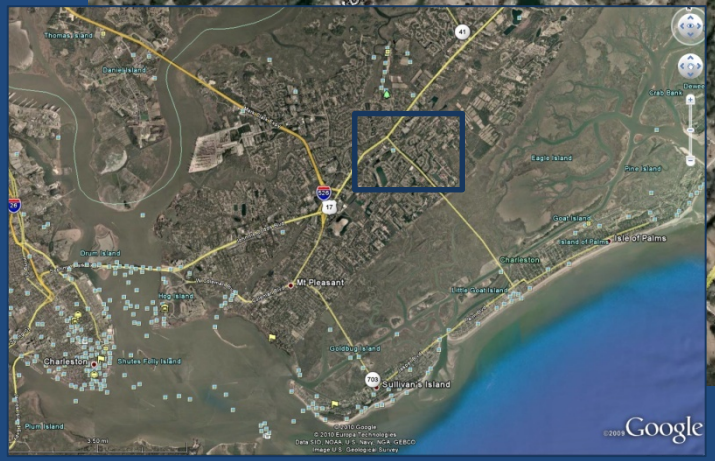
island apple snails

Callinectes bocourti

Asian tiger shrimp

in the wild

MARMAP chevron trap; Sep16 2010;
34 cm TL, 641 g
in 46 m, 90 km ESE of Charleston


Google


Callinectes bocourti

Photo by Robert Overton, GA Marine Ext Serv

2009 – 45 *Penaeus monodon* reported

- NC – 16
- SC – 13
- GA – 3
- FL – 1
- AL – 5
- MS – 3
- LA – 4

Addition confirmed by Micah Bakenhaster at FWC
Mature female ~ 226 mm TL

2010 – 10 *Penaeus monodon* reported

- NC – 0
- SC – 4
- GA – 0
- FL – 1
- AL – 0
- MS – 0
- LA – 5

Penaeus monodon, juvenile, TL ~**110-120 mm (~4½); collected Aug 2010 in the FL ICWW ~12 km south of New Smyrna Beach; collected by private citizen and given to FL Fish.Wldlf.Res.Inst. staff**

Source(s)?

Established breeding populations along the US coast?

US escapement?

Caribbean aquaculture operations (Dominican Republic, L. maracaibo, Venezuelan coast)?

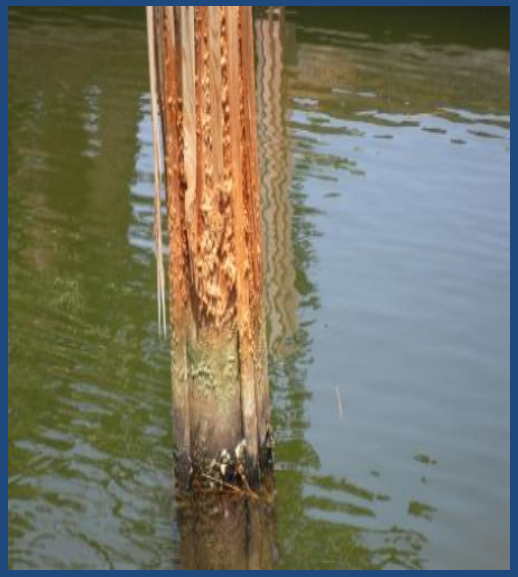
Established wild Caribbean populations?

continuous ballast transport and delivery?

A COMPREHENSIVE OVERVIEW OF THE BROWN ROT DOCK FUNGUS PROBLEM

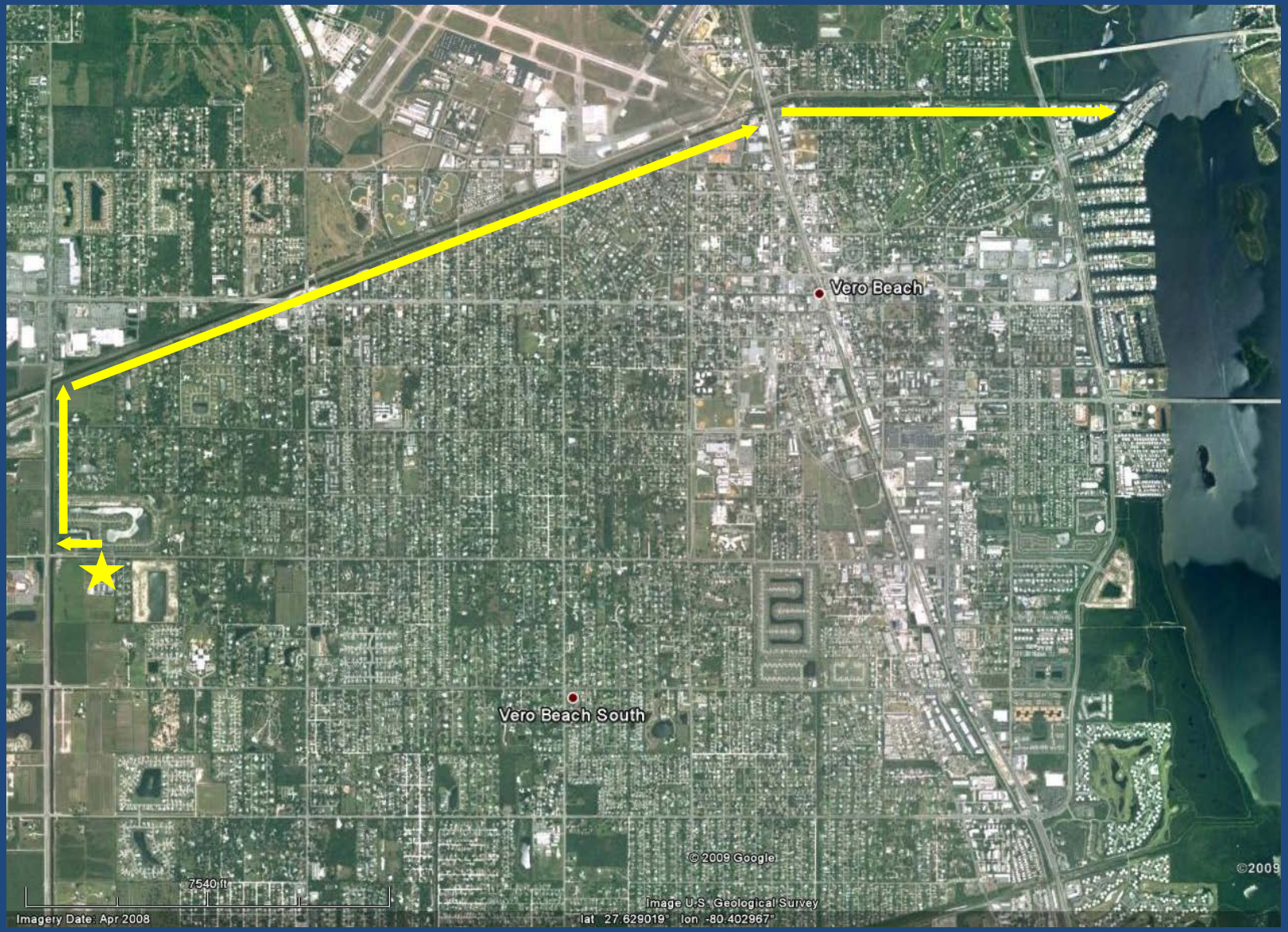
SMT Manufacturing, Inc.

Surface Modification TECHNOLOGY, INC.



SMT Manufacturing, Inc., Orlando, FL

www.surfacemod.com


Vero Beach
Vero Beach South
© 2009 Google
©2009
7540 ft
Image U.S. Geological Survey
Imagery Date: Apr 2008
lat 27.629019° lon -80.402967°

Farm Level Issues in Aquaculture Certification: Shrimp

Jason Clay and Aaron A. McNevin World Wildlife Fund

Introduction of Nonnative Species

Little is known about the overall impact of the introduction of shrimp species from aquaculture.

***P. monodon* from Asia have been transported throughout Asia and brought to Latin America. *P. monodon* from Africa have been taken to Asia and the Pacific, and there has been a flow of this same species from Southeast Asia to South Asia and vice versa.**

The introduction of shrimp from different regions, even of the same species, introduces new DNA and characteristics that have not evolved *in situ*. These interactions are probably insignificant within ponds, but when shrimp escape during water exchange or harvest they could cause genetic pollution that could alter the inbred characteristics, and perhaps the viability, of wild populations.

The introduction of disease pathogens from other areas is equally important. Diseases previously found only in Taiwan and China have now spread throughout Asia and even into Latin America, where they have caused billions of dollars in damage each year. The impact of disease pathogens on wild stocks is not documented, but anecdotal information suggests that it may be serious. For example, in 1992–1993 when diseases reduced shrimp aquaculture production in China by 60 to 70%, the production of wild caught shrimp in that country also declined by 90%. It is not clear whether the disease was transmitted from the wild to the ponds or vice versa, but there does seem to be some direct relationship.

Pathogens can be introduced through the transportation of infected larvae or broodstock that are released without proper quarantine and handling. In addition, diseases have been found to be viable in processed frozen product that is shipped to another region for further processing.