

**FISHERIES DISASTER RELIEF PROGRAM (FDRP)
ANNUAL REPORT FOR FY 2007**

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FDRP Project Title and Project No.: 657785 Developing a turtle safe lightstick

Funding Agency: NOAA

1. Purpose of the Project (one paragraph)

A common practice in the longline fisheries is to attach light sources near the baited hook on the branch lines to attract fish. Laboratory experiments have shown that lightsticks used in the longline fisheries attract turtles. The goal of this work is to develop lightsticks that will reduce sea turtle interactions with the longlines. Based on recent laboratory experiments, we are developing potential “turtle safe” lightsticks.

2. Progress during FY 2007 (One-two paragraphs, including a comparison of the actual accomplishments to the objectives established for the period, and the reasons for slippage if established objectives were not met):

Modifications that incorporated shading (decreasing light shining upwards to the surface) were made to lightsticks. These prototype shaded lightsticks were tested on the R/V Oscar Sette to determine their feasibility for use on longlines and to examine the effects that the shades would have on the sink rates and vertical migration of the lightsticks. In addition, communication with Eric Brooks and Peter Lindgren of Lindgren-Pittman (a longline gear manufacturer) has been initiated with regards to developing lightsticks of that have on-off characteristics that fall within promising behavioral studies conducted in a laboratory setting. In addition, a second lightstick manufacturer, Savewave, has also expressed interest in further developing blinking lightsticks.

Design and testing of modified lightsticks have commenced and will continue after the summer (September). Radiometric measurements of commercially available lightsticks have not commenced, but will begin in the fall (after the field season for Project 657783). Reasons for the slippage of timeline include: delays in obtaining FDRP funding, and prioritization of projects included in Project No.: 657783 (Test of sea turtle responses to light sticks, shark shapes) due to their limited field season.

3. Plans for project completion:

Once projects included in Project No.: 657783 are completed (late September), focus will shift to completing the radiometric measurements.

4. List of papers published in refereed journals during FY 2007.

N/A

5. Other papers, technical reports, meeting presentations, etc.
 - A) Preliminary data has been included in a NOAA Admin report and will be included in a NOAA Tech Memo.