

# 2010 – 2012 Northern Gulf of Mexico Kemp’s Ridley Stranding and Incidental Capture Summary

Wendy G. Teas  
NOAA, National Marine Fisheries Service, Southeast Fisheries Science Center, Miami, FL

SEFSC Contribution PRBD-2012-07

September 4, 2012

## 2010-2012 Kemp’s Ridley Size Distribution in the Northern Gulf of Mexico

Stranding and incidental capture data collected by the Sea Turtle Stranding and Salvage Network (STSSN) in the northern Gulf of Mexico from 2010-2012 were summarized to provide information on Kemp’s ridley size distribution by state. Data from 2012 only includes reports from January through August. Straight carapace lengths (SCL), actual or estimated, were summarized into 5 cm bins by state and are shown in Figure 1. When only curved carapace lengths (CCL) or estimates were available they were converted to straight lengths using the equation in Teas 1993. A total of 1,594 Kemp’s ridleys were included in the size distribution summary – 348 from Louisiana, 921 from Mississippi, 255 from Alabama and 70 from St. Joe Bay, Florida.

The most common size class reported from Louisiana, Mississippi and Alabama was 30.0 – 34.9 cm, while the most common size class reported during the 2010 St. Joe Bay cold stun event was 25.0-29.9 cm. Kemp’s ridleys < 25.0 cm SCL were more commonly reported in Louisiana than in Mississippi and Alabama. Kemp’s ridleys < 25.72 cm (SCL) potentially are able to pass through the bars of TEDs with standard 4” (10.16 cm) bar spacing (Epperly and Teas 2002).

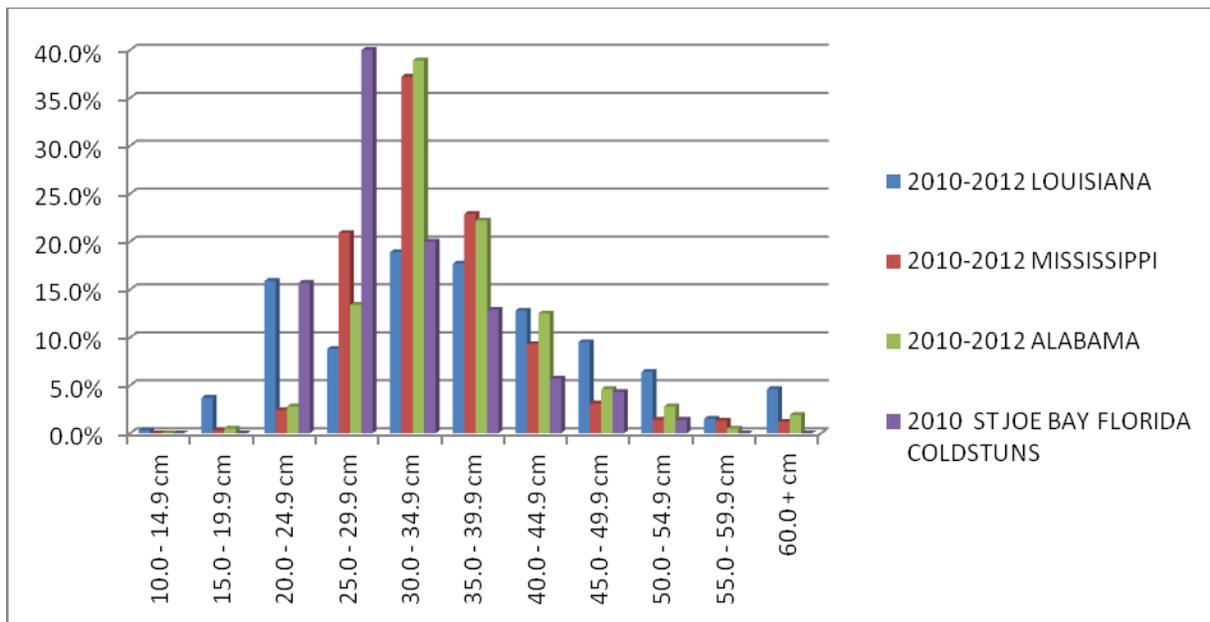


Figure 1. Kemp’s ridley size distributions in the northern Gulf of Mexico, 2010-2012. Louisiana, Mississippi and Alabama data include both reported strandings and incidental captures. St. Joe Bay Florida data only includes strandings reported during the January 2010 cold-stun event.

**Kemp’s Ridley Stranding Summary by State and Year**

From 2010-2012, 339 Kemp’s ridley strandings were reported from Louisiana, 703 from Mississippi and 251 from Alabama (Table 1). In Louisiana, approximately 19-25% of measured Kemp’s ridley strandings in 2010-2012 were <25.7 cm SCL, while a maximum of 2-5% of measured Kemp’s ridley strandings found in Mississippi or Alabama were <25.7 cm SCL.

It should be noted that much of coastal Louisiana is marsh or bayou areas that are not routinely monitored for turtle strandings, thus, these are minimum stranding numbers. Also, smaller turtles may be less likely to strand or be found since they are potentially more likely to be completely consumed by scavengers than are larger turtle carcasses.

Table 1. Kemp’s ridley strandings in Louisiana, Mississippi and Alabama by state and year.

<b>2010 - 2012 KEMP'S RIDLEY STRANDINGS - LA, MS, AL</b>				
	<b>Measured or Estimated Size</b>			<b>Total</b>
	<b>CLSL &lt; 25.7 cm</b>	<b>CLSL ≥ 25.7 cm</b>	<b>No size info</b>	
<b>LOUISIANA</b>				
<b>2010</b>	24	98	5	127
<b>2011</b>	21	88	5	114
<b>2012 (Jan-Aug)</b>	22	65	11	98
<b>MISSISSIPPI</b>				
<b>2010</b>	6	281	9	296
<b>2011</b>	5	232	28	265
<b>2012 (Jan-Aug)</b>	0	134	8	142
<b>ALABAMA</b>				
<b>2010</b>	6	112	21	139
<b>2011</b>	2	59	5	66
<b>2012 (Jan-Aug)</b>	0	35	11	46

**Kemp’s Ridley Incidental Capture Summary by State and Year**

From 2010-2012, 218 Kemp’s ridley incidental captures were reported from Mississippi, 9 from Louisiana and 4 from Alabama (Table 2). The large number of Mississippi incidental captures were initially documented in 2010 during the Deepwater Horizon oil spill response when all turtle interactions in the northern Gulf of Mexico were being reported. Since the oil spill, Institute for Marine Mammal Studies (IMMS) staff has conducted outreach at Mississippi piers to encourage reporting of hook and line captures. Beginning in 2012, signs were placed at piers telling the public to call IMMS to report marine turtle incidental captures. In addition, in 2012 IMMS stationed staff at two piers with the highest number of reported incidental captures in order to immediately retrieve turtles that were captured at those piers. Thus, both outreach and reporting have increased over time. In 2011 and 2012,

approximately 8% of measured incidental captures reported in Mississippi had straight carapace lengths <25.7 cm, while in 2010 the number was about 3%.

Table 2. Kemp’s ridley incidental captures in Louisiana, Mississippi and Alabama by state and year.

<b>2010 - 2012 KEMP'S RIDLEY INCIDENTAL CAPTURES - LA, MS, AL</b>				
	<b>Measured or Estimated Size</b>			<b>Total</b>
	<b>CLSL &lt; 25.7 cm</b>	<b>CLSL ≥ 25.7 cm</b>	<b>No size info</b>	
<b>LOUISIANA</b>				
<b>2010</b>	0	1	0	1
<b>2011</b>	0	1	7	8
<b>2012 (Jan-Aug)</b>	0	0	0	0
<b>MISSISSIPPI</b>				
<b>2010</b>	1	37	0	38
<b>2011</b>	2	23	2	27
<b>2012 (Jan-Aug)</b>	12	136	5	153
<b>ALABAMA</b>				
<b>2010</b>	0	0	0	0
<b>2011</b>	0	1	1	2
<b>2012 (Jan-Aug)</b>	0	1	1	2

**Kemp’s Ridley Cold-Stun Summary, St Joe Bay, Florida**

In January 2010 a large cold-stun event occurred in St. Joe Bay, Florida. A total of 70 Kemp’s ridleys were documented, with approximately 21% measuring <25.7 cm SCL (Figure 3). This percentage of small turtles is comparable to the 19-25% of Kemp’s ridley strandings in Louisiana that measured <25.7 cm SCL.

Table 3. Kemp’s ridley cold-stuns, St. Joe Bay, Florida, January 2010.

<b>2010 ST JOE BAY FLORIDA COLD-STUNS</b>				
	<b>Measured or Estimated Size</b>			<b>Total</b>
	<b>CLSL &lt; 25.7 cm</b>	<b>CLSL ≥ 25.7 cm</b>	<b>No size info</b>	
<b>ST JOE BAY FLORIDA</b>				
<b>2010</b>	15	55	0	70

### **Literature Cited**

Epperly, S.P. and Teas, W.G. 2002. Turtle excluder devices – Are the escape openings large enough? Fishery Bulletin 100:466-474.

Teas, W.G. 1993. Species composition and size class distribution of marine turtle strandings on the Gulf of Mexico and southeast United States coast, 1985-1991. NOAA Technical Memorandum NMFS-SEFSC-315, 43 p.