

### **Totals**

As of the 23<sup>rd</sup> of February, 2011, a total of 30 dolphins have been found stranded on the coasts of Mississippi and Alabama. At least 29 of these were positively identified as bottlenose dolphins. Fifteen of the strandings occurred in the state of Mississippi, with the remaining 15 in Alabama.

These numbers represent more than a tenfold increase in strandings as compared to 2009 and 2010. In January of 2009 and 2010, no calf strandings had been reported compared to 4 calf strandings reported in 2011. During February of those years, only one calf stranding was reported each year. This year, calves have made up 24 of the 30 strandings reported, the other five were sub-adults or adults, and one animal was unable to be identified due to advanced decomposition. As of this date, a total of 24 calves were recovered in the month of January and February in Mississippi and Alabama. Ten of these were found in Mississippi with the remaining 14 recovered from Alabama.

### **Unusual Mortality Event (UME)**

NOAA declared the high number of dead dolphins an unusual mortality event (UME). The declaration of a UME by NOAA signifies the importance of this unusual calf mortality. Because of this declaration, many resources are expected to be allocated on investigating this phenomenon. IMMS is working very close with NOAA and DMR during this event to determine factors involved in the deaths of these animals.

### **Stranding Response and Sample Collection**

The IMMS Stranding Hotline is covered by staff 24 hours a day, 7 days a week. When a stranding is reported, a response team is coordinated to respond to the stranding as soon as possible. Depending on the state of decomposition of the animal, a necropsy (animal autopsy) is performed at the stranding location, or back at the Center for Marine Education and Research in Gulfport, MS. The initial stages of a response include taking GPS coordinates, photography of the animal, and observing any abnormalities on the animal's body. Further examination includes basic measurements and tissue sampling. More detailed necropsies involve sampling, blubber, muscle, liver, lungs and teeth for various analysis. Depending on the state of decomposition of the animal, other tissues may be taken. In calves, the lungs are examined to determine whether air is present, allowing for a better analysis of the life stage of the calf and determination of whether the animal was a still-born.

### **Sample Testing**

IMMS coordinates with various labs, such as Mississippi State University, that have the capability to process dolphin samples. Samples are sent to laboratories to be analyzed, based on the condition the animal at the time of examination, for toxicology, histopathology, virology, parasitology, genetics, and age. It takes several weeks to months for the samples to be analyzed and the results returned to IMMS.

### **Preliminary Results**

IMMS does not currently have any conclusive results regarding the cause of the dolphin deaths in Mississippi and Alabama. So far, IMMS has been able to perform full necropsies on around one third of the 24 dead calves. It is taking time to piece together the answers from the dolphins examined. The majority of the calves were too decomposed to conduct a full necropsy but tissue samples were collected for analysis. We continue to urge the public of Mississippi and Alabama to report stranded dolphins, other marine mammals and sea turtles to us on 1-888-SOS-DOLPHIN (1-888-374-3443).