



# NOAA Teacher at Sea Margaret "Greta" Dykstra-Lyons Onboard NOAA Ship DAVID STARR JORDAN August 1 - 15, 2005

## Log 1

### Cruise Information and Background

The name of this west-coast cruise is Collaborative Survey of Cetacean (marine mammals) Abundance and the Pelagic (ocean) Ecosystem (CSCAPE). It is a



collaboration between the Southwest Fisheries Science Center and the National Marine Sanctuaries Program. In addition to counting marine mammals, scientist hope to add to photo-identification stocks, collect biopsies, observe cetacean behavior, collect oceanographic-related data for ecosystems analysis, contribute to the leatherback turtle prey study, and collect

data from sonobuoys. There are a total of seven cruise legs, which will take the DAVID STARR JORDAN the length of the west coast and 300 miles off shore. The ship will be following a predetermined grid pattern. Each leg lasts 20 days. After the 20 days at sea the JORDAN will rest at various ports along the west coast for four days.

The boat has a regular staff of 16: four NOAA Corps officers, five engineers, five deck crew, and two cooks. For this cruise an additional 13 scientists take the total number to 29.

The scientists fall under the command of the cruise leader.

She is responsible for directing nine animal observers, two oceanographers, and one teacher at sea. The mammal observers are on the flying bridge from sunrise (6:50) until sunset (8:45). The six observers rotate across three stations on the flying bridge, spending 40 minutes at



each station. During their watch two of the observers are scanning the waters with megabinoculars referred to as big eyes (both on the port and starboard side of the ship), while the third observer mans a computer and enters in mammal data in the event a mammal is spotted. In addition to the three mammal observers, the two bird observers alternate in two-hour shifts. Last, but not least, each leg of the cruise has an independent observer.



The oceanographers spend the majority of their day sleeping--only because they are busy with operations before sunrise and deep into the evening hours. Daily, there are water samples taken before and after sunrise up to 1000 meters. These samples allow the oceanographers to collect data about chlorophyll content, salt content, nutrient content, and primary productivity. On a regular basis throughout the day they also collect surface-water samples for

chlorophyll analysis and conduct regular water temperature tests. Most nights after the sun has set, they also collect plankton in a bongo net tow.

When the members of the JORDAN are not working there is a lot of emailing friends and family, reading, sharing stories, watching one of 500+ movies, preparing professional reports, studying, working out and catching tuna off the aft deck.

