

U.S. Antarctic Marine Living Resources Program
2010-2011 Weekly Field Reports
R/V Moana Wave

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Ship-board research:

The Antarctic Ecosystem Research Division (AERD) began its 2010-11 charter of the R/V *Moana Wave* on 7 January. This represents the beginning of the 20th sea-based field season during the 25th Anniversary season of the US AMLR Program, the most successful long-term ecosystem monitoring and assessment program in the Antarctic. Over the following three days, laboratory vans, containers, supplies and personnel were all loaded aboard the *Moana Wave*, docked. In addition to the oceanographic survey's scientific crew, from a number scientific institutions in the US and other countries, the *Moana Wave* also embarked four scientists that will examine the utility of using small remotely operated quadcopters equipped with cameras to photograph seal and penguins colonies at the US AMLR Cape Shirreff field station, and one additional US-based scientist, for transport to field camps.

The *Moana Wave* departed Punta Arenas at 12:30 UTC on 11 January. The first two days of the Drake crossing was uneventful before a large storm slowed progress. Despite the first storm of the season, we arrived at King George Island on the morning of 15 January to fair weather and clear skies. One US biologist was transferred to the Copacabana field station. Offloading of cargo and personnel occurred during that day, and the acoustic transducers were calibrated in Ezcurra Inlet that evening. The ship arrived at Cape Shirreff on the afternoon of 16 January. Supplies and personnel were quickly offloaded. The four scientists and their quadcopter gear were deposited at Cape Shirreff, on Livingston Island.

Following the resupply of the two field camps, the ship proceeded to the western edge of the West Area, and the large scale survey began at 03:00 on 16 January. The survey of the West Area was uneventful until a storm impacted sampling of the last three stations of the area on the morning of 20 January.

In general, large numbers of salps (*Salpa thompsonii*) were present inshore along with moderate abundances of krill (*Euphausia superba*). Offshore, samples were dominated by the copepod *Calanoides acutus*, and the presence of large numbers of *Limacina helicina*, a pteropod. The preliminary results from the West Area will be reported next week.

Submitted by the Chief Scientist of the US AMLR oceanographic survey

