

Davidson Seamount Expedition  
Summary of surface observations  
May 18-23, 2002

Prepared by Scott Benson

During daylight hours, while the ROV *Tiburón* was deployed on the Davidson Seamount, surface fauna were identified and quantified. Observers maintained a visual watch for marine mammals, seabirds, and surface-active fish species using large, 25 X 150 power "bigeye" binoculars, and a pair of handheld 7 X 50 binoculars. Total binocular height above the water was about six meters, giving a maximum ship-to-horizon sighting distance of approximately 9 km (5 nm). Scan sampling was performed every 30 minutes for a duration of 10-15 minutes, searching behind the ship with the stern-mounted 'bigeyes' and in other directions with the handheld binoculars. Prior to each scan sample, weather conditions were entered into a laptop computer that was linked to a global positioning system (GPS) to record time and position. Sighting effort was maintained throughout the duration of the expedition, regardless of sea state conditions.

Sighting rates of surface organisms were strongly dependent on sea state and swell height. Over ninety percent of surface scan samples were made in choppy seas (> sea state 4). A total of 22 marine mammal sightings was made during the expedition. Eight species were encountered. The most commonly sighted species was Dall's porpoise (*Phocoenoides dalli*), which often approached the ship. One hundred seventy-three sightings of seabirds were recorded, however, some birds were attracted to the ship and may have been counted more than once. The most common species encountered was Black-footed Albatross (*Phoebastria nigripes*), a notorious ship-follower.

As part of the ongoing scientific efforts to monitor the status and recovery of sperm whales in the Eastern North Pacific, genetic studies of population structure are being conducted by the National Marine Fisheries Service - Southwest Fisheries Science Center. We attempted to obtain skin samples from a small pod of sperm whales sighted 22 May, approximately four miles from the *R/V Western Flyer*. A small boat was launched from the ship and approached within 30 meters of the whales before they dove beneath the surface. We were unable to relocate the whales and no skin samples were obtained.

Marine mammals, seabirds, and fish species encountered over the Davidson Seamount

<u>Marine mammal species</u>	<u>Sightings</u>	<u>#Animals</u>
Pacific white-sided dolphin ( <i>Lagenorhynchus obliquidens</i> )	1	450
Northern right whale dolphin ( <i>Lissodelphis borealis</i> )	2	49
Killer whale ( <i>Orcinus orca</i> )	1	8
Dall's porpoise ( <i>Phocoenoides dalli</i> )	19	51
Sperm whale ( <i>Physeter macrocephalus</i> )	1	4
Humpback whale ( <i>Megaptera novaeangliae</i> )	1	1
California sea lion ( <i>Zalophus californianus</i> )	1	5
Unidentified fur seal	1	1
Unidentified otariid	3	3

<u>Seabird species</u>	<u>Sightings</u>	<u>#Birds</u>
Black-footed Albatross ( <i>Phoebastria nigripes</i> )	135	220
Laysan Albatross ( <i>Phoebastria immutabilis</i> )	1	1
Northern Fulmar ( <i>Fulmarus glacialis</i> )	4	5
Stejneger's Petrel ( <i>Pterodroma longirostris</i> )	2	2
Sooty Shearwater ( <i>Puffinus griseus</i> )	10	18
Pink-footed Shearwater ( <i>Puffinus creatopus</i> )	1	1
Unidentified shearwater ( <i>Puffinus sp.</i> )	3	3
Leach's Storm Petrel ( <i>Oceanodroma leucorhoa</i> )	1	1
Unidentified storm petrel ( <i>Oceanodroma sp.</i> )	6	9
Pomarine Jaeger ( <i>Stercorarius pomarinus</i> )	1	1
Parasitic Jaeger ( <i>Stercorarius parasiticus</i> )	1	1
Unidentified jaeger ( <i>Stercorarius sp.</i> )	3	3
Western Gull ( <i>Larus occidentalis</i> )	1	1
Unidentified gull (Laridae)	1	1
Unidentified Tern ( <i>Sterna sp.</i> )	3	3

<u>Surface-active fish species</u>	<u>Sightings</u>	<u>#Fish</u>
Ocean sunfish ( <i>Mola mola</i> )	2	2
Unidentified shark	2	2