

Village-based Walrus Studies in the Chukchi Sea

Report to Eskimo Walrus Commission, 9 December 2010



In early September we received reports from USFWS that walrus carcasses were hauled out on beaches near Pt. Lay and Corwin Bluffs, Alaska. We contacted Willard Neakok, the Eskimo Walrus Commissioner for Point Lay, who put together a crew to survey the beaches near Pt. Lay that were accessible without disturbing live walrus. The crew estimated 18 carcasses were visible and seven were accessible without disturbing the haulout. We prepared carcass survey datasheets, a camera, measuring tapes, and a GPS unit. Anna Bryan went to Pt. Lay to pass along the equipment, explain the datasheet, and answer any questions. Neakok's crew accompanied by Bryan examined and measured seven carcasses. All seven were calves of the year that showed signs of being crushed; most likely by larger walrus. In addition to examining carcasses, the crew also recorded GPS locations for the north and south ends of the haulout and recorded the most recent haulout location boundaries. Neakok and his crew also traveled to Icy Cape on 24 September and reported that they did not see any walrus carcasses or live walrus on the beaches between Pt. Lay and Icy Cape, except for those still hauled out near the original location.

We coordinated with USFWS, USGS, Alaska SeaLife Center (ASLC), the North Slope Borough (NSB) and Mr. Neakok in order to collect samples from the walrus carcasses and try to examine additional carcasses. The carcasses however were located near or within the active haulout and could not be accessed without disturbing the haulout and risking more calf fatalities. Kasegaluk Lagoon began to

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freeze before the haulout dissipated so that boating to the carcasses was no longer an option. The NSB was willing to provide helicopter services to take personnel, including a veterinarian from the ASLC, to the carcasses. On 26 September, a storm caused waves to cover the haulout beach which drove the live walrus off the beach and washed the carcasses off the beach. Plans to examine carcasses were put on hold until an area with a concentration of carcasses could be identified.

We worked with USGS to map the footprint of the haulout as accurately as possible in order to try to estimate the number of walrus that hauled out. Dr. Dan Monson (USGS) sent us composite photographs of the haulout taken by the COMIDA survey on 6 September and Dr. John Citta (ADF&G) worked with the photographs, ArcGIS, Google Earth and GPS locations from people on the ground to create a shapefile from which to calculate area covered. Using all of these tools the estimated area covered 48,822 m². The width of the beach was the most difficult to estimate and may have the largest effect on the accuracy of the estimated area. Although there is no significant tide in this area the direction and speed of the wind can narrow or widen the beach significantly.

Justin Crawford and Mark Nelson (ADF&G) went to Cape Lisburne to see if they could access small haulouts there to deploy satellite tags without disturbance. Two satellite transmitters were deployed near Cape Lisburne; one on 17 and one on 19 September. Both tags were deployed on adult females 10-15 years of age, one of which was accompanied by a calf of the year; the other female was alone. The tag on the female with the calf worked well and showed that the pair hauled out several times near Cape Lisburne prior to going to sea and hauling out on the Russian coast near Cape Serdtse Kamen on 6 October. The other tag appeared to deploy fine and was positioned well on the body, however it transmitted for only 2 days after deployment.

