MAERL DISTRIBUTION ACROSS PROPOSED YINSTAY SALMON FARM SITES

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In order to illustrate the % maerl cover across the Yinstay sites, % live/dead maerl cover for each station was mapped using the Surfer (Golden Software Inc.) data gridding and contouring package (Surfer v8). Surfer works by assimilating spatially referenced parameters (x-y-z data) and reduces the data to a grid of spatially-averaged values by application of a user-selected algorithmic routine. As a range had been used for % maerl cover, the median of each range was used for the z-value.

Figure 1 (over page) provides the output as a % maerl contour map for the Yinstay sites. Locations of cage groups are overlain.

Comparing the maerl contour map with bathymetry across the sites (see over) an approximate correlation between water depth and %maerl cover can be seen, which agrees with various studies on maerl distribution (e.g. Bosence, 1983 and Mitchell and Collins, 2004). Depth distribution of maerl is limited by a combination of physical processes including variability in light, wave energy and seafloor slope, and generally not seen below the 20 m contour.

References


Figure 1 Percentage Maerl Cover Across the Yinstay Sites

Figure 2 Bathymetry and Survey Stations – Yinstay West and Yinstay East