

# Studi tentang distribusi suhu dan salinitas pada lokasi penangkapan ikan layaran di Teluk Amurang

Study on distribution of temperature and salinity at sailfish fishing location in Amurang Bay

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## ABSTRACT

Amurang bay located in South Minahasa is one of the potential fishing areas in North Sulawesi. In fishing practices, fishermen choose their fishing spots based on their experience, and these very often are costly and time-consuming. Marlin fishing area in Amurang bay can be determined by observing oceanographic parameters such as surface temperature. It can happen because each species has its own temperature range preference that suitable for its living habit and can be tolerated by its body and therefore affected their distribution. Marlin fishing season in the Bay of Amurang is not certain. Besides natural signs of fishing season knowable by fishermen, oceanographic factors like the distribution of temperature and salinity in the location needs to be known. The purpose of this study is 1) to determine the distribution of temperature and salinity at marlin fishing location; 2) to determine the vertical and horizontal distribution of the temperature up to 10 m deep in marlin fishing areas. There are several points in Amurang Bay as marlin fishing location. Marlin fishing season can be identified by signs presence of *ikan peda cina* (moon fish) as fish bait. Study of the distribution of temperature and salinity was carried out at five stations and in each station there were five points fishing location determined by their coordinates. Marlin has three species, i.e black marlin, blue marlin and *marlin loreng*. In Indonesia this fish has some names, such as :*layar*, *setuhuk hitam*, *meka*, *tumbuk* dan *setuhuk*. This fish is called *layar* by people around the Amurang Bay. Fishing gears used to catch this fish are troll line and long line. Profile of temperature at Amurang bay for 5 days of measurement generally decreased with depth but not significant. Salinity profiles indicated that salinity from 1 to 10 m deep increased but not significant. The lowest temperature value of 30.33°C was found in the station 5 at 10 m deep and the highest temperatures of 30.87°C was found at station 2 in 1 m deep. The lowest salinity of 36.54‰ was at station 1 at 1 m deep and the highest salinity of 38.10‰ was at stations 4 and 5 at 10 m deep.

**Keywords:** distribution, temperature, salinity, marlin fishing, Amurang Bay

## ABSTRAK

Perairan Teluk Amurang yang terletak di Kabupaten Minahasa Selatan merupakan salah satu daerah perikanan yang potensial bagi masyarakat Sulawesi Utara. Dalam melakukan penangkapan ikan, nelayan hanya berdasarkan pengalaman untuk menentukan daerah penangkapan sehingga mereka memerlukan biaya yang besar dan waktu yang lama. Daerah penangkapan ikan layaran di perairan Teluk Amurang seyogianya dapat diketahui dengan memperhatikan parameter oseanografi, seperti suhu permukaan laut. Hal ini disebabkan karena setiap spesies ikan memiliki kisaran suhu tertentu yang sesuai dengan kebiasaan hidupnya yang dapat ditoleransi oleh tubuhnya sehingga dapat mempengaruhi penyebaran ikan di suatu perairan. Musim penangkapan ikan layaran di perairan Teluk Amurang masih belum pasti setiap tahunnya. Selain adanya tanda-tanda alami yang dapat diketahui oleh nelayan tentang musim penangkapan, faktor oseanografi yaitu tentang distribusi suhu dan salinitas di lokasi penangkapan perlu diketahui. Adapun tujuan dalam penelitian ini adalah untuk 1) menentukan distribusi suhu dan salinitas pada lokasi penangkapan ikan layaran; 2) menentukan distribusi suhu dan salinitas secara vertikal dan horizontal sampai kedalaman 10 meter pada lokasi penangkapan ikan layaran. Ada beberapa titik di perairan Teluk Amurang yang merupakan lokasi penangkapan ikan layaran. Lokasi ini sudah diketahui oleh masyarakat nelayan secara turun temurun. Musim penangkapan ikan layaran dapat diketahui dengan adanya tanda-tanda di antaranya keberadaan jenis ikan untuk umpan yaitu ikan peda cina (*moon fish*). Penelitian tentang studi distribusi suhu dan salinitas ini di laksanakan pada lima stasiun dan masing-masing stasiun ada lima titik lokasi penangkapan yang

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