Sumber daya Lobster Pasir (Panulirus Homarus) dan pengelolaannya secara berkelanjutan di Perairan Palabuhanratu Sukabumi Jawa Barat = Scalloped spiny Lobster Resources (Panulirus homarus) and sustainable management in Sukabumi, West Java / Tomi Suwartono

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Abstrak

Sumberdaya perikanan lobster merupakan komoditas bahan makanan populer yang memiliki nilai ekonomis tinggi sehingga banyak dicari dan ditangkap secara global dan mempunyai harga jual yang sangat tinggi. Hal tersebut menyebabkan penangkapan lobster dilakukan secara terus menerus dan tidak memperhatikan kondisi sumberdaya dan lingkungan. Teluk Palabuhanratu merupakan salah satu sentra perikanan lobster di Jawa Barat. Spesies lobster di Teluk palabuhanratu yaitu lobster pasir (Panulirus homarus) telah mengalami penurunan tangkap.

Tujuan penelitian ini (1) mengkaji populasi lobster pasir berdasarkan aspek biologi dan aspek dinamika populasi; (2) mengetahui status pemanfaatan dan pengelolaan sumber daya lobster pasir; (3) menyusun strategi pengelolaan sumberdaya lobster pasir di perairan Palabuhanratu yang berkelanjutan.

Penelitian dilaksanakan dengan pengambilan sampel setiap satu bulan sekali. Analisis parameter populasi digunakan program FISAT II dan pengkajian potensi Maximum Sustainable Yield (MSY) dianalisis dengan model surplus produksi, strategi pengelolaan dan A`WOT. Hasil penelitian menunjukkan kisaran panjang karapas lobster pasir sebesar 30-101 mm dengan ukuran panjang karapas dibawah 8 cm sebanyak 97,6%. Pola pertumbuhan lobster pasir bersifat allometrik negatif. Nilai Lc< Lr menunjukkan bahwa lobster pasir betina sudah banyak tertangkap sebelum mencapai ukuran rata-rata pertama kali mengerami telur. Panjang asimtotik (L) lobster pasir jantan lebih kecil dari betina, sedangkan koefisien pertumbuhan (K) jantan lebih cepat dari betina. Nilai laju eksploitasi (E) untuk lobster pasir jantan maupun betina diperoleh hasil diatas nilai optimum yaitu 0,59 dan 0,61. Potensi lestari dan tingkat pemanfaatan sumberdaya lobster di perairan WPP 573 sebesar 662,93 ton/tahun dan 910 ribu trip dengan alat tangkap standar jaring. Hasil tangkapan terjadi fluktuasi dengan trend menurun dan laju eksploitasi diatas nilai optimum, hal ini mengindikasikan terjadinya overfishing.

Berdasarkan analisis alternatif strategi pengelolaan yang dapat dilakukan berdasarkan skala prioritas adalah (1) optimalisasi pemanfataan sarana dan prasarana (2) peningkatan kualitas sumber daya manusia, (3) peningkatan layanan transportasi distribusi pemasaran, (4) penegakkan aturan untuk menghindari overfishing.

<hr>Lobster fishery resources are popular food commodities with high economic value so they are captured globally and have very high selling prices. This causes lobster capture to be condunted continuously and does not notice to resource condition and environment. Palabuhanratu bay is one of the lobster fishing centers in West Java. Scalloped spiny lobster (Panulirus homarus), one of the lobster species in Pelabuhanratu bay, was run into overexploitation.

The purpose of this study (1) study the population of scalloped spiny lobsters in Palabuhanratu waters based on aspects of biology and aspects of population dynamics; (2) know the status of utilization and management of scalloped spiny lobster resources in the waters of Palabuhanratu and its surroundings; (3)

develop a strategy for managing sustainable of scalloped spiny lobster resources in the waters of Pelabuhanratu.

The study was conducted from October 2017 to September 2018 with sampling every once a month. Population parameter analysis used the FISAT II program and the assessment of Maximum Sustainable Yield (MSY) potential was analyzed by the production surplus model, management strategy and A`WOT. The results showed a range of scalloped spiny lobster carapace length of 30-101 mm with a carapace length below 8 cm as much as 97.6%. The growth pattern of scalloped spiny lobster both of female and male was negative allometric. The value of Lc <Lr indicates that female have been caught a lot before reaching the average size of the first time incubating eggs. Asymptotic length (L) male was smaller than female, while male growth coefficient (K) was faster than female. The rate of exploitation rate (E) for male and female lobsters were obtained above the optimum value of 0.59 and 0.61. The sustainable potential and level of lobster resource utilization in the waters of WPP 573 were 662.93 tons/year and 910 thousand trips with fishing gear standard of net. Within 10 years (2005-2014), there were several values that were below and above the MSY and Fmsy limits, which meant that the catch had fluctuations in the potential for sustainability.

Based on an analysis of alternative management strategies that can be carried out based on priority scale is (1) optimization of utilization of facilities and infrastructure; (2) The increasing of human resources quality; (3) improvement of marketing distribution transportation services; (4) enforce rules to avoid overfishing.