

PROFIL HORMON REPRODUKSI DAN PERILAKU HARIAN HARIMAU SUMATERA (*Panthera tigris sumatrae* Pocock, 1929) DI PUSAT REHABILITASI HARIMAU SUMATERA DHARMASRAYA DAN TMSBK BUKITTINGGI

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INTISARI

Harimau Sumatera (*Panthera tigris sumatrae* Pocock, 1929) merupakan subspecies harimau yang dikategorikan dalam status sangat terancam punah (*critically endangered*). Upaya konservasi secara *ex-situ* dilakukan dengan adanya pusat rehabilitasi dan penangkaran (taman margasatwa). Perbedaan *treatment*, lingkungan, serta tujuan antara pusat rehabilitasi dan penangkaran dalam upaya konservasi Harimau Sumatera menjadi sesuatu yang menarik untuk dikaji. Penelitian ini bertujuan untuk melihat gambaran status reproduksi Harimau Sumatera di dua habitat konservasi yang berbeda tersebut, serta bagaimana hubungannya dengan perilaku reproduksi dan perilaku harian. Pengambilan data dan pengamatan dilakukan pada bulan Oktober 2023 - Februari 2024. Pengambilan data dilakukan di Taman Margasatwa dan Budaya Kinantan Bukittinggi (TMSBK) selama 43 hari, dan Pusat Rehabilitasi Harimau Sumatera Dharmasraya (PR-HSD) Arsari selama 34 hari. Koleksi sampel dilakukan secara non invasif dengan pengambilan feses dari setiap individu Harimau Sumatera. Sampel feses Harimau Sumatera jantan dan betina betina di TMSBK dan PR-HSD yang diperoleh sebanyak 51; 44 dan 11; 13 pencuplikan. Analisis kadar hormon dilakukan menggunakan metode ELISA. Data perilaku harian diperoleh menggunakan metode *instantaneous recording*. Berdasarkan profil hormon progesteron dan testosteron Harimau Sumatera di PR-HSD dan TMSBK Bukittinggi, individu harimau diindikasikan sedang dalam periode puncak musim kawin. Data perilaku harian menunjukkan distribusi yang berbeda antara harimau di PR-HSD dan TMSBK dengan perilaku *resting* menjadi perilaku yang dominan teramati. Terdapat korelasi yang tidak signifikan antara kadar hormon reproduksi (progesteron dan testosteron) dengan perilaku harian Harimau Sumatera.

Kata Kunci: Hormon Reproduksi, Konservasi *ex-situ*, *Panthera tigris sumatrae*, Perilaku Harian, Progesteron, Testosteron

**PROFILE OF REPRODUCTIVE HORMONES AND DAILY BEHAVIOR
OF SUMATRAN TIGER (*Panthera tigris sumatrae* Pocock, 1929) AT
DHARMASRAYA SUMATRAN TIGER REHABILITATION CENTER
AND TMSBK BUKITTINGGI**

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ABSTRACT

Sumatran tiger (*Panthera tigris sumatrae* Pocock, 1929) is a subspecies tiger that is categorized as critically endangered. Ex-situ conservation efforts are carried out through the existence of rehabilitation and breeding centers (wildlife parks). The differences in treatment, environment, and objectives between rehabilitation centers and breeding centers in Sumatran tiger conservation efforts are interesting to study. This study aims to see the picture of the reproductive status of Sumatran tigers in the two different conservation habitats, and how it relates to reproductive behavior and daily behavior. This study aims to see how the reproductive status of Sumatran tigers in the two different conservation habitats, as well as its relationship to reproductive behavior. Data collection and observations were conducted in October 2023 - February 2024. Data collection was conducted at Kinantan Bukittinggi Wildlife and Culture Park (TMSBK) for 43 days, and Dharmasraya Sumatran Tiger Rehabilitation Center (PR-HSD) Arsari for 34 days. Sample collection was carried out non-invasively by taking feces from each individual Sumatran tiger. Fecal samples of male and female Sumatran tigers in TMSBK and PR-HSD were obtained as many as 51; 44 and 11; 13 samplings. Hormone level analysis was carried out using the ELISA method. Daily behavioral data were obtained using the instantaneous recording method. Based on the progesterone and testosterone hormone profiles of Sumatran tigers in PR-HSD and TMSBK Bukittinggi, individual tigers were indicated to be in the peak period of mating season. Daily behavioral data showed different distributions between tigers in PR-HSD and TMSBK with resting behavior being the dominant behavior observed. There was an insignificant correlation between reproductive hormone levels (progesterone and testosterone) and daily behavior of Sumatran tigers.

Keywords: Reproductive Hormones, Ex-situ conservation, *Panthera tigris sumatrae*, Daily Behavior, Progesterone, Testosterone.