



## INTISARI

Hutan Kemuning, Temanggung, Jawa Tengah diketahui memiliki potensi keanekaragaman hayati dan satwa liar terancam punah kukang Jawa (*Nycticebus javanicus* E.Geoffrey 1812). Selain itu, hutan Kemuning merupakan hutan dataran rendah alami tersisa di Jawa Tengah yang menerapkan sistem agroforestri berbasis kopi di dalam pengelolaan hutan. Berbagai faktor seperti deforestasi, fragmentasi, isolasi, dan perilaku masyarakat diduga mempengaruhi dinamika populasi dan seleksi habitat oleh kukang Jawa di kawasan hutan tersebut. Penelitian ini bertujuan untuk; (a) mengetahui kesesuaian habitat kukang Jawa di Jawa Tengah, (b) mengetahui proporsi tingkat habitat okupansi, peluang deteksi, dan faktor dominan yang berpengaruh terhadap penggunaan habitat oleh kukang Jawa di hutan Kemuning, (c) mengetahui karakteristik habitat yang dipilih kukang Jawa dan faktor-faktor yang mempengaruhi kehadiran satwa tersebut pada level *microsite* di hutan Kemuning, dan (d) mengetahui bagaimana perspektif stakeholder yang dapat mempengaruhi manajemen agroforestri yang memiliki konsekuensi terhadap kesesuaian habitat kukang Jawa di hutan Kemuning

Beberapa aspek penting terhadap kehadiran kukang Jawa yang diteliti meliputi kesesuaian habitat kukang Jawa, okupansi habitat, seleksi habitat kukang Jawa pada level mikro-site, dan pandangan masyarakat di sekitar hutan terhadap pengelolaan hutan. Keterkaitan keempat aspek tersebut dikaji berdasarkan teori Johnson (1980), dimana pada seleksi level geografi dianalisis menggunakan metode maxEnt, Pada level *home range* dianalisis menggunakan metode habitat okupasi, pada level *micro site* dianalisis menggunakan metode analisis seleksi sumber daya, dan teori framing digunakan untuk analisis faktor sosial ekonomi masyarakat. Penelitian ini dilakukan di kawasan hutan Kemuning, Kecamatan Bejen, Kabupaten Temanggung Jawa Tengah dan juga berada di kawasan hutan Perhutani pangkuan hutan KPH Kedu Utara, BKPH Candiroto, RPH Petung dan RPH Candiroto.

Hasil penelitian menunjukkan bahwa hanya 0,76% (25.715,4 ha) dari total wilayah propinsi Jawa Tengah yang sesuai untuk habitat kukang Jawa dimana 2,2% dari habitat kukang Jawa tersebut berada di kawasan konservasi, 4,6% di kawasan hutan lindung, dan 93,2% di luar kawasan dilindungi. Kukang Jawa menghuni habitat sekitar 25% dari keseluruhan areal di hutan Kemuning. Lanskap hutan Kemuning mendukung keberadaan populasi kukang Jawa yang diketahui berada di propinsi Jawa Tengah dan dapat mewakili salah satu kawasan hutan dataran rendah terpenting untuk konservasi kukang Jawa di Indonesia. Konservasi kukang Jawa di kawasan hutan ini harus menjadi prioritas tinggi. Populasi dan habitat potensial bagi kukang Jawa sebagian besar berada di luar kawasan konservasi. Kukang Jawa menyukai hutan sekunder dengan lereng curam dan jauh dari gangguan keberadaan manusia. Faktor-faktor yang berpengaruh terhadap tingkat hunian kukang Jawa di hutan Kemuning meliputi jarak dari jalan, jarak dari pemukiman, dan jarak dari sumber air. Terdapat dua variabel habitat yang memberikan pengaruh signifikan terhadap peluang seleksi sumber daya oleh kukang Jawa di hutan Kemuning yaitu tutupan tajuk dan slope. Karakteristik habitat kukang Jawa di hutan Kemuning adalah kawasan hutan dataran rendah sekunder dengan tutupan kanopi yang lebat, terletak di lereng yang curam, dengan tingkat gangguan habitat rendah. Manfaat ekonomi dan ekologis dari hutan Kemuning melalui pengelolaan hutan sistem agroforestri kopi mendorong warga masyarakat sekitar hutan untuk ikut tetap mempertahankan dan melestarikan keberadaan kawasan hutan alam beserta keanekaragaman hayati yang ada.

Kata kunci: kukang Jawa, fragmentasi habitat, kesesuaian habitat, habitat okupansi, analisis seleksi sumber daya, teori Framing, hutan Kemuning, agroforestri kopi.



## ABSTRACT

Kemuning Forest, Temanggung, Central Java known to have the potency for biodiversity especially endangered wildlife of Javan slow loris (*Nycticebus javanicus* E.Geoffrey 1812). Kemuning forest is the remaining natural lowland forest in Central Java that implements a coffee-based agroforestry system within the forest management. Various factors such as deforestation, habitat fragmentation, habitat isolation, and community behavior are thought to influence population dynamics and habitat selection by Javan slow lorises in the forest area. This research is intended to improve data and information on; (a) the suitability of Javan slow loris habitat in Central Java, (b) the proportion of habitat occupancy, detection opportunities, and dominant factors that may affecting the use of habitat by Javan slow loris in the Kemuning Forest, (c) the habitat characteristics chosen by Javan slow loris and some factors that affecting the presence of this animal at the microsite level in the Kemuning forest, and (d) how the involved stakeholder's perspective affects the agroforestry management which has consequences for the suitability of the Javan slow loris habitat in the Kemuning forest

Some important aspects of the presence of Javan slow loris studied in this research include the suitability of Javan slow loris habitat, habitat occupancy by the Javan slow loris, habitat selection by the Javan slow loris at the micro-site level, and views of the community around the forest area on forest management which may affect the animal habitat. The Johnson (1980) theory is performed within this research. Using Maximum Entropy analysis, habitat occupancy analysis, resource selection analysis, and theory of framing, the above stated key aspects of the presence of the Javan slow loris were addressed. This research was conducted in Kemuning forest area, Bejen sub-district, Temanggung Regency, Central Java which falls under the management of Perhutani (KPH Kedu Utara, BKPH Candiroti, RPH Petung and RPH Candiroti).

Results showed that 0.76% (25,715.4 ha) of the total area of Central Java Province was suitable for their habitat in which 2.2% of suitable habitat is in conservation area, 4.6% in protected forest area, and 93.2% outside the protected area. Javan slow loris occupied around 25% of the total area in Kemuning forest. The Kemuning forest landscape which is located in Central Java Province supports the existence of the Javan slow loris population. It may represent one of the most important lowland forest areas for conservation of the Javan slow loris in Indonesia. Therefore, protection of this forest area must be a high priority. The population and potential habitat for Javan slow loris are found mostly outside the conservation area. Several aspects such as distance from the road, distance from the settlement, and distance from water sources are all factors affecting the habitat occupation by Javan slow loris in Kemuning forest. There are two habitat variables that have a significant influence on the potential for resource selection by the Javan slow loris in Kemuning forest, namely canopy cover and slope. The characteristics of the Javan slow loris habitat in Kemuning forest are secondary lowland forest areas with dense canopy cover, located on steep slopes, with low level of habitat disturbance. In addition, the Kemuning forest is a natural lowland forest that implements a coffee-based agroforestry system within the forest area. The economic and ecological benefits from Kemuning forest encourage locals around the forest to participate in maintaining and preserving the existence of the natural forest area including the Javan slow loris.

**Keywords:** Javan slow loris, habitat fragmentation, habitat suitability, occupancy habitat, resource selection analysis, framing theory, Kemuning forest, coffee-based agroforestry system .