

I. INTRODUCTION

1.1 Background

Tiger (*Panthera tigris*) is one of the largest predators which distributed once covered almost the entire Asian plains. In Indonesia, there are three subspecies of tigers namely the Balinese tiger (*Panthera tigris balica*) and the Javanese tiger (*Panthera tigris sondaica*) and the Sumatran tigers (*Panthera tigris sumatrae*). The Sumatran tiger is one of the three subspecies that are still survive today, while the other two subspecies gone, extinct in the 1940s (Balinese tiger) and 1980s (Javanese tiger) (Ganesa, 2012).

Tigers are highly adaptive wildlife, as they can be found in a variety of habitat types, ranging from tropical forests, swamps, and mangrove forests, to grasslands in the Himalayan foothills (Sanderson *et al.*, 2006). On the island of Sumatra, tigers can be found from the northern province of Aceh to the southern province of Lampung. However, the rise of land conversion activities into other uses such as plantations and industrial forest plantations, caused a significant losses of the natural forest area (Uryu *et al.*, 2010) and fragmented it which greatly affects tiger habitat, as well as other species, especially large ones such as Sumatran elephants (*Elephas maximus sumatrensis*), Sumatran rhinos (*Dicerorhinus sumatrensis*), and Sumatran orangutans (*Pongo abelii*).

The biggest threat to Sumatran tiger conservation is human activity, especially the conversion of forest areas for development purposes such as plantations, mining, settlement expansion, transmigration program, and other

infrastructure development. In addition to causing habitat fragmentation, these activities also trigger conflicts between humans and tigers, causing casualties on both sides, often resulting in the elimination of tigers from their habitat (Soehartono, 2007).

The human-tiger conflict has long been a serious problem in the Sumatran landscape. From 1997 to 2007, 235 cases of human-tiger conflict were documented across the landscape with at least 36 tigers killed or injured. Many people have been killed and injured by tigers. As a result, villagers often attempt to kill problem tigers, although they are encouraged to contact the authorities to try to get the tiger trapped alive and removed from the area (World Wildlife Fund, 2010).

According to the Minister of Forestry Regulation number P.53/Menhut-II/2014 on wildlife conflict management, tiger conflict management is carried out with consideration of the threat to human safety and the risk to tiger safety. Rescue actions are carried out when tigers often appear around residential areas and begin to interact with humans and disturb human order and ownership around residential areas. In addition to conflicts, rescue actions are also carried out for tigers victimized of snares and tigers which become pets.

The role of the animal rehabilitation center is needed in further handling animals in conflict. In the Regulation of the Minister of Forestry Number P.22/MENLHK/SETJEN/KUM.1/5/2019 about Conservation Institutions, animal rehabilitation centers are conservation institutions that carry out activities to adapt animals for some reason are in the human environment to be returned to their habitat. To rehabilitate tigers that has been removed from its habitat as a result of the human-

tiger conflict, the rehabilitation center is needed to make sure that the tigers are ready to be released and/or translocated back to the wild. One of the rehabilitation centers for the Sumatran tigers is present in West Sumatra, precisely in Dharmasraya Regency called The Dharmasraya Sumatran Tiger Rehabilitation Center (PR-HSD ARSARI).

It is not easy to be able to rehabilitate and return animals to their natural habitat. Such is the case with the Sumatran tiger Putra Singgulung, which is a male Sumatran tiger currently inhabiting the PR-HSD ARSARI. The protected animal was trapped in June 2020, after wandering for several days in fields and residential areas in Nagari Gantung Ciri, Solok Regency, West Sumatra with his sister, the female Sumatran tiger Putri Singgulung. After being rehabilitated for 5 months at PR-HSD ARSARI, both tigers were released on November 26, 2020. However, in the first week of December 2020, these two tigers were again evacuated not far from the release site (Harlina, 2022).

This study aims to obtain information on the daily behavior of Sumatran tigers at PR-HSD ARSARI and can be used as a guide in releasing rehabilitated Sumatran tigers and can be useful for evaluating the progress of Sumatran tiger rehabilitation.

1.2 Problem Formulation

Based on the description above, the main problem in this research are:

1. How are the daily activities of Sumatran tigers rehabilitated at PR-HSD ARSARI?
2. What is the level of habituation to human of Sumatran tigers rehabilitated at PR-HSD ARSARI with humans?

1.3 Research Objectives

The objectives of this research are:

1. To know the daily activities of Sumatran tigers rehabilitated at PR-HSD ARSARI.
2. To know the level of habituation to human of Sumatran tigers rehabilitated at PR-HSD ARSARI with humans.

1.4 Research Benefits

The benefits of this research are that it can be used as a recommendation in releasing rehabilitated Sumatran tigers and can be useful for evaluating the progress of Sumatran tiger rehabilitation.