

THE INCREASING OF OLIVE RIDLEY (*Lepidochelys olivacea*) POPULATION AND ITS CORRELATION WITH CONSERVATION ACTIVITY IN ALAS PURWO NATIONAL PARK BANYUWANGI-EAST JAVA

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Received September 8-2009; Received in revised form October 19-2009; Accepted October 29-2009

ABSTRACT

One of the sea turtles nesting location in Indonesia that have a positive impact for olive ridley (*Lepidochelys olivacea*) captivity breeding is National Park Alas Purwo (TNAP) District of Banyuwangi East Java Province. Research was done by observation, interviews and descriptive analysis. This research includes sea turtles captivity breeding activities as conservation efforts and also reviews the conservation success rate of increasing olive ridley population. Captivity breeding process of sea turtles in TNAP are divided into five phases: lalar (search for and collect sea turtle eggs), preparation and making of semi-natural nest, eggs incubation, maintenance and also release tukik (baby of sea turtle). Sea turtles conservation efforts in TNAP showed positive impact for the olive ridley but not yet for the other three species of sea turtles (green turtle, hawksbill and leatherback). Increase trend of olive ridley numbers those nested in TNAP should be used as a success indicator of captivity breeding and conservation processes those undertaken. Conversely, the presence of green turtles populations and leatherback turtles very low and tends to decline. This condition is expected to push for increasing activity of nesting turtle's habitat conservation in TNAP and also in the other of sea turtles nesting areas.

KEYWORDS: captivity breeding, conservation, sea turtle, TNAP

INTRODUCTIONS

Well management of sea turtle nesting habitat is one of the key factors to maintain the existence of sea turtle populations that decline in the last few decades. In Indonesia there are several turtles nesting sites relatively well managed. One of them is Alas Purwo National Park (TNAP) District of Banyuwangi East Java Province. TNAP has potential coastal areas to support reproductive process of turtles. According Kurniawan *et al.* (2003) there are four species of sea turtles nesting in this region, such as olive ridley (*Lepidochelys olivacea*), leatherback (*Dermochelys coriacea*), hawksbill (*Eretmochelys imbricata*), and green turtle (*Chelonia mydas*).

The TNAP has made great efforts of conservation to increase the sea turtle populations in the region. The activity on sea turtle conservation activity initiated in 1983 with the main action to developing a captive breeding, inventorying the number of sea turtles landed and doing semi-natural hatchery of collected eggs from nesting habitat of TNAP. These efforts likely resulted positive impact for increasing number of olive ridley species, but the presence of the other sea turtles species declines continuously. However, the nesting habitat management of sea turtles needs to maintain and develop, because without good management efforts of this area might give bad effect for sea turtle landing in the nesting habitat.

There are several steps to produce hatchlings in conservation area until their releasing to the sea. This paper describes the captivity breeding activities of sea turtle as part of conservation efforts undertaken in TNAP Banyuwangi East Java Province and reviews the success history of sea turtles conservation efforts based on the trend of sea turtles nested in TNAP.

MATERIALS AND METHODS

Location Description

TNAP is located in Tegaldlimo and Purwoharjo Sub district, Banyuwangi District-East Java Province. Geographically, TNAP is located in the east cape of Java Island, south beach region between 8°26'45"-8°47'00" South Latitude and 114°20'16"-114°36'00" East Lengthwise. TNAP has 43,420 ha wide, consisting of several zones: a sanctuary zone of 17,200 ha, a wilderness zone of 24,767 ha, an intensive use zone of 250 ha, and a buffer zone of 1,203 Ha. Generally, TNAP has flat topography, light to heavy wavy with the highest top Lingga Manis Mountain of 332 meters above sea surface level. Almost all of soil conditions are kind of sandy clay soil and small part of its formed light and soft soil. Beside it serve as sea turtle nesting habitat, TNAP area is also appropriate for the habitat of various kinds of animals such as mammals, birds and reptiles (Kurniawan *et al.*, 2003).