The first occurrence of Kemp’s Ridley turtle (*Lepidochelys kempii*) in Raja Ampat, Indonesia

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Abstract. Widayari F, Nugroho A, Arafat G, Sunoko R, Wahyudin RA, Sayuti M, Bakkula E, Ballamu F. 2023. The first occurrence of Kemp’s Ridley turtle (*Lepidochelys kempii*) in Raja Ampat, Indonesia. *Biodiversitas* 24: 4934-4942. Territory Indonesian waters are one of the waters in Southeast Asia that have been a turtle habitat; six of the seven types of turtles live in these waters, and Kemp ridley's turtle (*Lepidochelys kempii*) is the seventh reported to have recently emerged. The research objectives of the study were to identify the area location emergence of Kemp’s Ridley turtle, determine morphology, and release Kemp’s Ridley turtle. Location identification was based on the Raja Ampat District Central Statistics Agency data. Visual identification of turtles proceeds by looking at their morphology, namely carapace shape, number of vertebral and costal scutes, the form of the plastron, number of inframarginal scutes, and appearance of head shape juxtaposed on External Morphology. The water area where Kemp’s Ridley turtle was found had a constant temperature, moderate wind speed, high humidity, and rainfall. The results of identifying the turtle morphology matched Kemp’s Ridley turtle. After outreach to the community, Kemp’s Ridley turtles were released into nature. The first appearance of the Kemp’s Ridley turtle in Indonesia is undoubtedly an exciting study material for further study regarding the migration map, distribution, and other factors that cause changes in its migration.

Keywords: Distribution, Kemp’s Ridley turtle, *Lepidochelys kempii*, Papua

INTRODUCTION

Indonesia is a country along the equator, so it has a tropical climate with more than 17,500 islands with a sea area of more than 360 million hectares. Indonesia is also located between the 20°N/LS isotherms, which indicates an ideal location to support the growth of various biodiversity, including turtles (Pelupessy et al. 2021). Sea turtles are marine vertebrates capable of extraordinary long-distance migration across all ocean basins to reach favorable foraging sites or breeding grounds (Luschi 2013). The application of marine protected areas is carried out to protect turtles, coral reefs, and fish so that it positively impacts the economic situation of coastal communities (Zamzami et al. 2020). There are seven species of sea turtles around the world (Cáceres-Farias et al. 2022). Indonesia is one of the countries in Southeast Asia whose waters are a turtle habitat. Six species of turtles live in Indonesian waters, namely the green turtle (*Chelonia mydas*), hawksbill turtle (*Eretmochelys imbricata*), gray turtle (*Lepidochelys olivacea*), flatback turtle (*Natator depressus*), leatherback turtle (*Dermochelys coriacea*), and the loggerhead turtle (*Caretta caretta*) (Elfidasari et al. 2022), while the Kemp’s Ridley turtle (*Lepidochelys kempii*) did not exist in Indonesian seas but is in the Gulf of Mexico and Atlantic Seaboard of the United States (Wibbels and Bevan 2016). However, in 2006, there were reports that juveniles of Kemp’s Ridley turtles were found in the Mediterranean (Tomás and Raga 2008) and northwestern Iberian Peninsula in 2014 (Covel et al. 2016).

Meanwhile, the only type of turtle that is not found in the waters of Southeast Asia (including Indonesia) is the Kemp’s Ridley turtle. The distribution of Kemp’s Ridley turtle is minimal, namely around the coast of Mexico, the Gulf of Mexico, Texas, Florida, South Canada, and North Canada; the Kemp’s Ridley turtle is the smallest turtle with a maximum shell length of 72 cm (Covel et al. 2016). Kemp’s Ridley sea turtle is the smallest sea turtle among all types of sea turtles. Adult turtles weigh around 30-50 kg, with a Carapace Length (SCL) of 50-78 cm. Kemp’s Ridley turtle carapace is as wide as it is long and contains five pairs of costal scutes that overlap the bony carapace. The color of the carapace in the adult phase is greyish-green, while the underside or plastron is yellowish (Reyes-López et al. 2021). Kemp’s Ridley turtle has a triangular head with a slightly hooked bill and the hatchlings are dark in color on both sides (Reyes-López et al. 2021). Juveniles
have a dark gray carapace with a yellowish-white plastron, and adults develop an olive-grey or dark green carapace and a cream or yellowish plastron (Reyes-López et al. 2021).

Our monitoring team found a turtle upside down in front of the beach in Rauki village, Raja Ampat, Indonesia. The turtle was deliberately turned over so that it would not escape onto the sea. Based on the results of interviews with residents, the turtle was entangled in nets when fishermen caught fish around the waters of Wigeo Island. Our team then carried out the documentation for morphological identification. Based on the results of morphological identification, we report that one turtle found in Rauki Village, Supnin Sub-district, Raja Ampat District was *L. kempii* turtle, which did not exist in Indonesia, with its primary habitat in Mexico and this turtle was still in the same genus as the Olive ridley turtle. Mexico is home to critical nesting and foraging habitat for six of the seven sea turtle species recognized worldwide, including the Leatherback, Green, Hawksbill, Loggerheads, Olive ridley, and Kemp’s Ridley turtles (Camacho-Sánchez et al. 2022). Kemp’s Ridley is the smallest sea turtle and is an endemic species to the Gulf of Mexico (Reyes-López et al. 2021). Adult female Kemp’s Ridley turtles mainly migrate along the coast of the Gulf of Mexico in shallow water less than 150 feet deep. Findings naturally become exciting material for future study, carrying on to relate Kemp’s Ridley migration to Indonesian waters. This research aims to know area conditions, identification morphology and release of Kemp’s Ridley turtle found in Rauki village, Raja Ampat, Indonesia.

The identification area of the discovered Kemp’s Ridley turtle is based on the Raja Ampat District Central Statistics Agency data. Various regional data on the discovery of Kemp’s Ridley turtle include astronomical data, temperature, humidity, rainfall, and descriptive data on aquatic habitats in May 2022.

**Identification of Kemp’s Ridley turtle morphology**

Identification of Kemp’s Ridley turtle was by visually looking at the morphology of the turtle, including carapace shape, number of vertebral and costal scutes, the shape of the plastron, number of infra-marginal scutes, and appearance of head shape. External Morphology identification by Pritchard and Mortimer (1999), the following anatomical features were observed in Figures 2 and 3.

Obtained morphological data from the appearance of head shape including prefrontal scales, postorbital, the appearance of carapace consisting of several vertebral and coastal scutes, as well as the appearance of plastron including the shape of the plastron and several infra-marginal scutes then matched the Morphology of Kemp’s Ridley turtle as is in Figure 4.

**Turtle release**

The release of caught turtles is one form of conservation against Kemp’s Ridley turtle, a Critically Endangered (CR) species (NOAA Fisheries 2022; IUCN 2023). Several efforts in conservation's central moment are habitat protection, reduction of catch sidelines, rescue and rehabilitation, and removal of murder (NOAA Fisheries 2022). The release of the Kemp’s Ridley turtle was carried out in coordination with relevant authorities and outreach to the community in Rauki Raja Ampat Village to protect endangered biota, especially turtles. Turtle release procedure, namely the team checking the condition of the turtle's body to ensure that the turtle was healthy; the team looked for the right location for releasing turtles that were free from predators, easy to get to the sea, and had no obstacles. The turtle was then lifted to the shoreline and adapted to seawater. After adjusting, the turtle was then released to swim into the sea.

**MATERIALS AND METHODS**

**Study area and regional conditions the discovery of Kemp’s Ridley turtle**

The research was conducted in May 2022. The research location was on the coast of Rauki Village, Supnin Sub-district, Raja Ampat District, Southwest Papua Province, Indonesia (Figure 1).

**Figure 1.** Research location of Kemp’s Ridley turtle in Rauki Village, Supnin Sub-district, Raja Ampat District, Southwest Papua Province, Indonesia
Figure 2. Anatomical features of sea turtle heads: note the location of the prefrontal and postorbital scales, which are diagnostic in identifying some species. Note two pairs of prefrontals in *Eretmochelys*, one couple in *Chelonia*, three pairs of postorbitals in Eretmochelys, and (usually) four pairs in *Chelonia*. Adult *Dermochelys* lack head scales (Pritchard and Mortimer 1999)

Figure 3. An illustrated guide to the external morphological features of sea turtles, including scutes of the plastron (lower shell) and carapace (upper body). Where scutes have multiple names, alternative names are provided in parentheses. The secondary sexual characteristics indicated are visible only in adult turtles. Inframarginal scutes span the distance between the marginal and large plastron scales (h, p, ab, l) (Pritchard and Mortimer 1999)

RESULTS AND DISCUSSION

Conditions of the discovery area Kemp’s Ridley turtle

Raja Ampat District is located below the equator line, between 0°45” North Latitude and 2°15” South Latitude, and between 129°15” and 132°00” East longitude. The Republic of Palau and the Pacific Ocean are to the north, Seram Utara District to the south, Seram Sea and Halmahera Tengah District to the west, Sorong Municipality and Sorong District to the East. Data results from the Meteorological, Climatological, and Geophysics Agency show that the area District Supin Raja Ampat in May 2022 had a lowest temperature of 22.9°C and highest at 33.9°C with the average temperature of 27.3°C. Meanwhile, the humidity was lowest at 76.8%, and highest at 95%, with an average of 84.1% (Amir and Inayatika 2023). The average wind speed in Raja Ampat District in May 2022 was 7.2 m/sec, and the highest was 22.3 m/sec while the minimum air pressure was 1003.5 bar, the highest was 1012.9 bar with an average air pressure of 1008.7 bar

Figure 4. The morphological structure of the Kemp’s Ridley turtle (Pritchard and Mortimer 1999)
Identification results morphology of Kemp’s Ridley turtle

Identification of carapace (upper shell)

Kemp’s Ridley turtle carapace in Raja Ampat is oval, short and wide (sloping) with color green young pale and wide, about 60 cm if seen from the dorsal part; part of her carapace has five pairs of lateral scutes and five central scutes, 11 marginal segments, and a couple of supra caudal, which have formed marginally similarly (Figure 5).

Identification of plastron (lower shell)

Morphology of Kemp’s Ridley turtle plastron (lower shell) in Raja Ampat is visibly colored white-yellowish, has a tail in the lower body with an anal part above it, and a pair of legs sectioned lower parallel tail (Figure 6). Two pairs of swimming legs in the anterior, with four inframarginal scutes, four pairs of plastrons (humeral, pectoral, abdominal, and femoral), over the near plastron with neck lower, there is a pair of gulars and a shaped intracocular dome. The section on the side right to the left of the plastron presents a scale armpit totaling five pieces that form a pattern on the picture, with the jaw lower forming a triangle isosceles. In parts lower, there is a pair of anal and an internal (Figure 6).

Identification of head part on

Form head Kemp’s Ridley in Raja Ampat, namely big with subtriangular, part side convex and has more from one pair of prefrontal scales (two couples). Kemp’s Ridley has a triangular-shaped head, a somewhat hooked beak, and large crushing surfaces (Figure 7).

Identification of head part side

Sighting head from part side, Kemp’s Ridley in Raja Ampat has a rounded mouth, shape eye rounded parallel with a nose in the front, and a triangular-shaped head with a slightly crooked beak (Figure 8).

Kemp’s Ridley turtle release

Before the research study, the supervision team took a persuasive approach by conducting outreach and awareness to the Rauki Raja Ampat village community and fishermen regarding the protection of turtles and other marine biota that need to be protected, conserved, and must not be caught. To obtain information on the capture of Kemp’s Ridley turtle, information was carried out on the chronology of captures and rapid morphological data collection of turtle. Data collection results show that the Kemp’s Ridley turtle has been caught for ten days. Our team (Papua Turtle Foundation and Loka PSPL Sorong) checked that the turtle’s physical condition was still normal and healthy, even though it had been caught for ten days. This turtle can be released into the sea without being recovered. Our team did not take tissue samples for DNA testing because we suddenly received information about the turtle catch, so we did not prepare the tools to take tissue samples. The team decided to immediately release the Kemp’s Ridley turtle to avoid death because it had been ten days since its capture. The release of Kemp’s Ridley turtle was carried out by fishermen who caught them witnessed by the socialization and supervision team, namely Satker PSDKP, Satker BKKPN Kupang, Loka PSPL Sorong, Papua Turtle Foundation, Raja Ampat District Marine and Fisheries Service, Raja Ampat Polair and Raja Ampat Navy. The release activity was carried out at Kampung Rauki Beach, Supin Sub-district, Raja Ampat District, on May 19, 2022. After socialization, the team looked for the right location for releasing the turtles, namely a clean beach, no obstacles, and guaranteed no predators. The turtles were lifted to the shoreline, acclimatized in seawater for approximately 5 minutes, and then released into the sea. Kemp’s Ridley turtle documentation release is presented in Figure 9.

Figure 5. Morphology of Kemp’s Ridley turtle carapace (upper shell). A. Kemp’s Ridley carapace in Raja Ampat (Photo by Aji Nugroho and Ferliana Widyaasari), B. Kemp’s Ridley Carapace (Pritchard and Mortimer 1999)
Figure 6. Morphology of plastron (lower shell). A. Kemp’s Ridley turtle plastron in Raja Ampat (Photo by Ferliana Widyasari), B. Kemp’s Ridley Plastron (Pritchard and Mortimer 1999)

Figure 7. Morphology head part on Kemp’s Ridley turtle. A. Head of Kemp’s Ridley in Raja Ampat (Photo by Ferliana Widyasari), B. Head Kemp’s Ridley (Pritchard and Mortimer 1999)

Figure 8. Morphology of head Kemp’s Ridley section side. A. Head of Kemp’s Ridley in Raja Ampat (Photo by Aji Nugroho), B. Head of Kemp’s Ridley (Pritchard and Mortimer 1999)

Figure 9. Activities Kemp’s Ridley release turtle (Photo by Ferliana Widyasari)
Discussion

Kemp’s Ridleys (Lepidochelys kempii) is the most endangered turtle species in the world which lives widely in the Gulf of Mexico, while its leading nesting site is on South Padre Island, Texas, United States (Frandsen et al. 2020), and some juvenile turtles sometimes beach themselves on European pelagic coasts (Covel et al. 2016). The New Guinea Bird’s Head Seascape, located in eastern Indonesia, is a global epicenter of shallow tropical waters with a marine biodiversity of more than 600 coral and 1,638 species of coral reef fish (Mangubhai et al. 2012). Seascapes also include critical habitat for globally threatened marine species, including sea turtles and cetaceans (Mangubhai et al. 2012). Currently, Indonesia’s largest egg-laying aggregation of sea turtle species is only in the Papua Bird’s Head Seascape. Kemp’s Ridleys are one of the recently discovered turtles in Bird’s Head, especially in Raja Ampat.

The average temperature in Raja Ampat, where Kemp’s Ridleys are found, was 29°C (Mangubhai et al. 2012), with an average temperature in Raja Ampat waters ranging from 29.2°-30.5°C and having a salinity ranging from 31-34 psu (practical salinity unit). Lithology in the form of sandstone, limestone, and clay was also identified from the survey, while sea surface temperatures ranged from 28-32°C (Rossarie and Kusumarni 2022), with an average nighttime sea surface temperature of 28.83°C (Rossarie et al. 2022), with a chlorophyll-a range of 0.3-2.0 mg/m² for the potential category (Rossarie and Kusumarni 2022). With high rainfall and sufficient sunlight, there is potential for biodiversity growth. Raja Ampat District is part of the Papua Bird’s Head Seascape, which is a global priority area for conservation because it has the most extensive coral reef biodiversity on Earth (Kaimana, Fakfak, Bintuni, Raja Ampat, Sorong, Tambrauw and Wondama Bay) synergistically having biophysical linkages, migration of species and genetic connectivity (Mangubhai et al. 2012). Tapilatu et al. (2017) stated that from a biophysical aspect, the waters in the Bird’s Head Seascape (BHS) of Papua are a migration area and habitat for endangered biota species, especially turtles, for laying eggs. The beaches in the BHS area where turtles lay their eggs are (i) Green sea turtle (Chelonia mydas): Ayau-Asia, Piai-Sayang, Waigoe (Tapilatu and Ballamu 2015), Venu-Kaimana (Tapilatu et al. 2020), Pisang- Tutaruga - Fak-fak, Wairundi (Tapilatu et al. 2017). (ii) Hawksbill sea turtle (Eretmochelys imbricata): Misool, Wayag-Sayang (Tapilatu et al. 2017), Venu-Kaimana (Tapilatu et al. 2020). (iii) Leatherback sea turtle (Dermochelys coriacea): Abun- Mushroomsba Medi, Warmon, Kaironi, Yenbekaki (Tapilatu et al. 2017; Tapilatu and Ballamu 2015). (iv) Olive ridley sea turtle (Lepidochelys olivacea): Abun-Jamursba Medi, Warmon, Kaironi (Tapilatu et al. 2017), Pulau Um, Malauumkarta.

Kemp’s Ridley turtle usually owns a comprehensive and long carapace and contains five pairs of overlapping costal scales overlapping with the carapace boney (Reyes-López et al. 2021). Kemp’s Ridley turtle generally matures its own carapace colored olive-grey or dark green with colored plastron pale yellowish, each front flipper has its claw, whereas the flipper behind can serve one or two paws (Reyes-López et al. 2021; NOAA Fisheries 2022). Adults Kemp’s Ridley turtle has a light olive-green carapace (NOAA Fisheries 2022). Plastron (lower shell) Kemp’s Ridley mature a yellow color (Pritchard and Mortimer 1999), colored yellowish-white (Reyes-López et al. 2021). Kemp’s Ridley turtle plastron has a distinct, small pore near the rear margin of the four inframarginal scutes (Pritchard and Mortimer 1999). The skull is similar to the Olive ridley’s (Chatterji et al. 2021). The Kemp’s Ridley turtle has a triangular-shaped head with a slightly hooked beak (NOAA Fisheries 2022). Kemp’s Ridley turtle usually has a triangular head with a somewhat hooked bill (Reyes-López et al. 2021). Kemp’s Ridley turtle has a relatively large and subtriangular charge with a side convex (Pritchard and Mortimer 1999).

Five of the seven species of sea turtles were reported to lay eggs in several coastal areas in Indonesia, including the Green sea turtle on Pangumbahan Beach, Sukabumi (Gifari et al. 2018; Adiluhung et al. 2021), and Piai Island, Raja Ampat District (Tapilatu and Ballamu 2015), the Hawksbill sea turtle on the beach of Kepayang Island, Belitung-Indonesia (Harahap et al. 2020), Olive ridley turtle on Bantul beach (Budiantoro et al. 2019), in Penimbangan Beach, Bali Island. (Nath et al. 2021), and Leatherback turtle on Mushroomsba Medi and Wormon Beaches, Tambrauw (Tapilatu et al. 2013), Loggerhead turtle on South Java and Bali beach (Kot et al. 2023). While the Flatback and Kemp’s Ridley turtles had never been found laying eggs in Indonesia. The Flatback turtle is protected and endemic in Northern Australia with a range as far as Eastern Indonesia but has never been known to lay eggs in Indonesia (Kot et al. 2023)

All turtles, except the Flatback turtle, are included in the protected biota. The International Union for Conservation of Nature (IUCN) lists the Green turtle as Endangered (EN), while the Leatherback turtle, the Kemp’s Ridley turtle, and the Hawksbill turtle as Critically Endangered (CR). The types of Olive ridley turtle, and Loggerhead turtle, and Leatherback are classified as Vulnerable (VU) (IUCN 2023). Kemp’s Ridley turtle was first registered under the Conservation of Endangered Species Act 1970 (NOAA Fisheries 2023), and then under the Endangered Species Act 1973. All types of sea turtles have been listed in Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). The convention prohibits all international trade in all products/results derived from sea turtles, whether eggs, meat, or shells (Chandrasekar and Srinivasan 2013).

Kemp’s Ridley is the most endangered sea turtle (Shaver and Caillouet Jr. 2015). The distribution of Kemp’s Ridley continued to decrease in the Gulf of Mexico (Covel et al. 2016), so the Mexican government began protecting egg clutches (nests) and hatchlings in Playa de Rancho Nuevo in 1966, but the population still declined (Caillouet Jr et al. 2015). Biologically, wild hatchlings face death threats from predators such as crabs, birds, and other reptiles. Besides biological threats, humans are the main reason for the decline in sea turtle populations (Guebert et al. 2013). Human threats such as over-development of
coastal areas (Hill et al. 2019), landfills (Rice et al. 2021), illegal capture of sea turtle eggs (Williams 2021), as well as activities related to the increase in fishing effort (Wibbels and Bevan 2016). In fishing activities, sea turtles are caught by catch in fishermen’s nets because the fishing area is also a habitat for sea turtles looking for food or heading to the beach to lay their eggs (Fajar et al. 2018). The Ecological Risk Assessment (ERA) estimates that around 3,500 turtles are caught by tuna longline fishing gear annually in the Indian Ocean (Indian Ocean Tuna Commission (IOTC) 2015). Another factor contributing to the threat of extinction for the Kemp’s Ridley turtle is accidental catching on fishing gear which can result in drowning or injury resulting in death or weakness (e.g., swallowing a hook or entangling fins) (NOAA Fisheries 2022). Sea turtle bycatch is a global problem. Kemp’s Ridley turtle is mainly caught with longlines, trawls, hook and lines, gillnets, pot/traps, and dredges in the Gulf of Mexico and the northwestern Atlantic (NOAA Fisheries 2022). Over the years, the use of turtle meat and shells has resulted in turtles being threatened with extinction (Espinoza et al. 2021). Law enforcement is not enough to overcome the problem of the extinction of the Kemp’s Ridley turtle; conservation trends such as keeping hatchlings have been proven not only to help restore turtle populations but also to bring economic benefits to conservation areas and communities (Pelupessy et al. 2021) so that turtle conservation can overcome the status and the tendency for the potential to decrease (Pelupessy et al. 2021). In conservation efforts, it is common for Kemp’s Ridley turtle nests located in Texas to be removed after laying for incubation in sometimes fenced or laboratory incubation facilities; this management practice protects clutches and hatchlings from many of the threats affecting nests in situ (Shaver et al. 2020). Without safety fences and the removal of nests for incubation, it was recorded that 19.2% of the hatchlings were preyed upon by predators (Shaver et al. 2020).

The first appearance of the Kemp’s Ridley turtle in Raja Ampat makes it possible for the turtle to look for a new suitable habitat because its habitat in Mexico is becoming polluted. It is proven that Kemp’s Ridleys turtle was found dead on Padre Island, the north coast of the Gulf of Mexico, due to the oil spill from the BP Deepwater Horizon 2010, and washed up on the East Coast of the United States (Wibbels and Bevan 2016; Frandsen et al. 2020). Kemp’s Ridleys turtle has also been reported to be found in the Mediterranean (Tomás and Raga 2008) and northwestern Iberian Peninsula (Covelo et al. 2016), which has moved out of its natural habitat in Mexico. Raja Ampat is an archipelago in Southwest Papua, Indonesia, known for its highly diverse marine ecosystems (Andradi-Brown et al. 2021). The Coral Triangle, which contains extensive reefs, mangrove forests, and seagrass beds, is located in this region (Mangubhai et al. 2012; Purwanto 2013; Andradi-Brown et al. 2021; Raja Ampat Marine Park Authority 2023). The Bird’s Head Seascape Marine Protected Area (MPA) network has been established to protect critical coastal ecosystems in the region, including 21% of coral reefs, 8% of mangrove forests, and 2% of seagrass beds (Purwanto et al. 2021). Combining coral reefs, seagrass meadows, and mangrove forests is essential for protecting coastal areas and increasing their resilience (Guannel et al. 2016). The seagrass beds gently follow the seascapes bathymetry until deeper water, and the network covers a variety of unique deep-sea habitats, including seamounts, pinnacles, and undersea canyons (Marine Conservation Institute 2023). Kemp’s Ridley turtle floats on large mats of sargassum (a type of brown algae) (National Wildlife Federation 2023). The biodiversity in Raja Ampat has excellent potential to become a new habitat for Kemp’s Ridley turtle, although in-depth studies are still needed.

Apart from Kemp’s Ridley turtle, the team has also cared for turtles caught by fishermen and then released them, as well as several conservation activities related to protecting turtle eggs in Sorong Raya and Raja Ampat. The conservation documentation of turtles caught by fishermen is presented in Figure 10.

![Figure 10. Turtles that have landed in Sorong Raya and Raja Ampat, Southwest Papua, Indonesia. A. Lepidochelys olivacea (Photo by: Ferliana Widyasari in the night), which landed Um Island, Malaumkarta Village, Sorong District. B. Chelonia mydas (Photo by: Mohammad Sayuti) was caught in Suprau, Sorong City, Southwest Papua waters. C. Dermochelys coriacea landed in Yenbekaki Village, Raja Ampat District (Kurnia 2020), D. Eretmochelys imbricata (Photo by Ferliana Widyasari) which fishermen caught from Sorong City](image-url)
In conclusion, the first occurrence of Kemp’s Ridley turtle in Raja Ampat, Indonesia, was proven based on the results of the morphological identification data of the specimen, namely the carapace (upper shell), plastron (lower shell), head part on, head part side which showed conformity with the morphological characteristics of Kemp’s Ridley turtle.

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