



## SEA TURTLE EGG ONLINE SHOPPING DURING COVID-19 MOVEMENT CONTROL ORDER (MCO) IN MALAYSIA

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The Phase-1 Movement Control Order (MCO) in Malaysia began on 18<sup>th</sup> March 2020. The MCO is a *cordon sanitaire* implemented as a preventive measure by the Malaysian government in response to the COVID-19 pandemic in the country and is commonly referred to in local and international media as a 'partial lockdown'. It prohibits movement and mass assembly of people nationwide, however, essential industries such as supermarkets, small wet markets, grocery stores and multi-functional stores selling daily necessities are allowed to continue their business.

There was a viral issue regarding the increase in sales of sea turtle eggs on social media and internet shopping platforms during the MCO. Among Asian countries, Malaysia consumes the highest number of turtle eggs (Gomez & Krishnasamy, 2019). Eggs are usually sold openly at public markets in the states of Kelantan and Terengganu because the sale is not illegal in these states. However, the closure of large wet markets and restrictions on interstate travel during the MCO prevented such sales. Once sea turtle nesting activity in Terengganu state increased in early April (Chan, 2013), sea turtle egg sellers began accumulating stockpiles of product and sought alternative approaches to reach customers and find new markets. Some sellers used online social media platforms like Facebook, entering social media groups and posting messages to find local customers which allow quick physical deliveries to a designated location for cash-on-delivery. Sellers also moved to online e-commerce platforms, such as Shopee (shopee.com.my), to reach a wider customer base. Courier agencies support such deliveries. A quick search of buyer's product reviews on the sellers' accounts reveals that customers received their orders in good (and edible) condition. This model of egg sales is problematic as e-commerce platforms are becoming very popular in Malaysia. As reported by Jabatan Perangkaan Malaysia (2020), more than 90% of households in Malaysia have internet access and the percentage of internet usage in Malaysia increased

from 81.2% in 2018 to 84.2% in 2019. The latest official statistics described millions of people as being "glued" to their devices during the MCO. Therefore, the availability of sea turtle eggs on online platforms is likely to increase the demand for eggs and place increased pressure on the conservation of endangered green turtles

Comments on social media about the viral online sale of sea turtle eggs on Shopee suggest ~10% of people object the idea of a total ban, 20–30% of the public are asking questions that suggest their reactions are neutral, and >50% do not support the sale of turtle eggs. Groups of people supporting egg sellers on social media have argued that egg sellers follow existing regulations and that the law in Terengganu state (Turtle Enactment 1951) allows them to sell any kind of turtle eggs other than leatherback (*Dermochelys coriacea*) turtle eggs (Jamalludin & Mohd Jani, 2017). Therefore, sellers do not feel that they are acting illegally, and they have never been questioned, arrested, or fined. In addition, there is no mechanism currently in place by which the government can identify whether eggs in the marketplace (physical or online) were sourced from permitted collection sites or protected sea turtle sanctuaries.

### Need for Total Ban

The online sale of sea turtle eggs must be addressed as this activity has now crossed the Terengganu border into states such as Pahang and Kuala Lumpur, in which the sale of sea turtle eggs is prohibited (Fisheries Enactment 1937 in Pahang and Fisheries Act 1985 in Kuala Lumpur). Although the sale of sea turtle eggs, other than those of the leatherback turtle, is not prohibited in Terengganu state, we believe the authorities should also prohibit the sales and transportation of eggs into other states. Much research has been done over the past decades to support this suggestion (Cooper *et al.*, 2002; Venkatachalam, 2004; Chan, 2006; Nabangchang *et al.*, 2008; Pattanayak *et al.*, 2008; Jamalludin & Mohd Jani, 2017; Azlina *et al.*, 2019; Mohd Jani *et al.*, 2020) and it is clear that

the sea turtles of Malaysia are conservation dependant. However, the Terengganu Turtle Enactment 1951 is yet to be amended. We believe there is an urgent need for revision and improvement of the current legal situation, and suggest authorities implement a total ban of selling and exporting all species of sea turtle eggs in Terengganu.

It is clearly time to speak out and resolve this issue by seeking the support of a wide range of people and corporations. As a start, members of the Society for Conservation Biology-Malaysia Chapter (SCB-MY) used social media platforms to raise public awareness of the online sale of turtle eggs. SCB-MY is a chapter of an international organisation for conservation professionals dedicated to enhancing the visibility of conservation efforts in Malaysia while encouraging the participation of the public. When SCB-MY members were alerted to the trader selling green sea turtle eggs on Shopee they immediately sprung to action. Members, who include individuals and representatives of government agencies and non-governmental conservation organisations, informed the management of Shopee. As a result, the “product” listing was almost immediately removed, the seller was blocked, and turtle eggs were banned on their platform. Shopee also released a statement that says “Shopee doesn’t tolerate the sale of animal and wildlife products on our platform, as stated in our Prohibited and Restricted Items policy. Users are required to adhere to our policies as well as the local policies, regulations and restrictions set by various governmental agencies and regulatory bodies. We take stern action against users who don’t comply with these standards.” The online commerce platform also asked the public to inform them in the event of any further sale of threatened animals so that they could take appropriate action.

Public concerns about the online sale of turtle eggs on the Shopee.com platform have been shared on social media, and provided leverage for Malaysian sea turtle conservationists to lodge a public complaint to the State Department of Fisheries (DOF). In response to the public complaint, the DOF issued a statement based solely on public advocacy to encourage public to stop eating turtle eggs. The State government released a statement to Agence France-Presse (AFP) (2020) on the 21<sup>st</sup> May 2020 that the issue would be addressed. The Chairman of Agriculture and Agro-based Industry, Terengganu State Executive Council (EXCO), Dr. Azman Ibrahim, also stated that “Amendments to the Terengganu Turtle Enactment (TTE) will be made”. The question remains whether the state government’s response to this issue is serious and when the amendments or other actions will be made.

As we understand it, legal action has not been previously taken against those who may have illegally collected and

sold sea turtle eggs due to confusion regarding the status of nesting beaches. For example, some nesting beaches in Terengganu state are not gazetted as sanctuaries, and landowners on these non-sanctuary beaches can bid for license from the State DOF to collect sea turtle eggs. The collected eggs can be sold but must be offered to the State DOF first. If sold to the State DOF, the eggs are transferred to hatcheries for incubation. If the State DOF chooses not to buy eggs, then sellers have the right to sell eggs in public. This tender system has previously provided necessary funding to the State government to operate their sea turtle conservation efforts. But, turtle eggs are often advertised as originating from Redang Island, which is in a Marine Park from where it is illegal to collect and subsequently sell eggs. Were these eggs really collected from Redang Island for illegal sale? Or were they legally collected from elsewhere and the source beach mistakenly named?

We strongly recommend that the Government of Malaysia take action such as apprehending people collecting eggs illegally. Egg sellers often say that eggs received are from captive breeders, but this is not likely to be a true statement as no turtle farms have been established nationwide. Documentation that eggs were offered to the State DOF before sale to the public should be made available, and the sellers should also accurately identify the beach that eggs were collected from.

### **Political Will**

The current political scene in Malaysia poses another challenge to sea turtle conservation. Political turmoil frequently affects the initiatives of the State DOF. However, in 2019, legislature took seriously the issue of conserving Terengganu’s turtles when they invited scientists to join the state legislation process. There is no political will by politicians who reject addressing the issue because they fear losing local supporters. Failure to take this opportunity is likely to be detrimental to Malaysia’s turtles. Malaysians are very aware of environmental issues due to nationwide campaigns that have been ongoing for more than 10 years and we believe the momentum of public opinion is already there. Politicians should take this opportunity to amend the TTE to support a total ban on the sale of turtle eggs throughout Malaysia and make law enforcement easier. A response on this issue will enhance their credibility as a progressive government.

The Terengganu State’s current government should also re-evaluate the practice of tendering licenses to egg collectors. Egg collectors can experience a financial loss if the number of eggs that are collected and sold within a season does not result in a profit greater than the cost of the lease. Islamic finance jurisprudence does not permit such an uncertain element (known as *gharar* in Arabic) that might harm any party, so there are grounds for the

State Government to address the *halal* (lawful) lease status.

### Next Steps

Turtles are an iconic species in Terengganu, with multiple conservation projects striving to ensure future populations. Currently, the state has the highest number of recorded landings for green turtles (*Chelonia mydas*) within Peninsular Malaysia (Chan, 2006), but many turtle eggs sold at the market. In the 1970s-80s, large numbers of nesting leatherback turtles attracted foreign tourists with economic benefits for local economies. However, by the early 1990s, the pressures of egg collection and fisheries bycatch had drastically reduced the number of leatherback turtles landing and the iconic species is now considered to be locally extinct (Chan *et al.*, 1988; Chan & Liew, 1996; Liew, 2011; Mohd Jani *et al.*, 2020). A downturn in tourism and local income was attributed to loss of this valuable natural asset (Chan & Liew, 1996; Ibrahim & Sharma, 2006; Liew, 2011) so there are socioeconomic as well as ecological reasons to conserve remaining turtle populations.

In conjunction with World Sea Turtle Day on 16<sup>th</sup> June 2020, SCB-MY organised public awareness programs including a two hour discussion about the challenges and opportunities of sea turtle legislation in Malaysia. We also initiated a public pledge to “Say No to Turtle Eggs” on change.org and received 8,500 pledges within a week. The majority of Malaysian Muslims will take their pledge seriously as it is regarded as a promise they must keep.

Malaysians eat turtle eggs but not turtles. Malaysians are a Muslim majority country and follow the clerics' explanation obtained by madhab Shafie (one of the four great Imams) that all eggs are *halal* (permissible in Muslim dietary law) because the nature of the egg itself has not yet been formed (embryonic development). An exception is eggs proven to be harmful. However, turtles are animals that live both on land and in water, so their consumption is *haram* (prohibited).

We were recently approached by Islamic centre officials to further discuss the implications of eating turtle eggs for the environment and human health. The declining trends of some turtle populations and their important roles in the ecosystem (Bjorndal & Jackson, 2002) underpin the need for their conservation, but turtle eggs also have high cholesterol content and potentially contain heavy metals (Kaska & Furness, 2001; Aguirre *et al.*, 2006; Lam *et al.*, 2006; Merwe *et al.*, 2009; WWF-Malaysia, 2009; Joseph *et al.*, 2014) so their consumption can result in health conditions. Such scientific evidence can be used to produce a *fatwa*, a formal interpretation on a point of Islamic law made by a qualified legal

scholar. Malaysians have a high religious compliance so this new action of producing a *fatwa* to forbid eating turtle eggs in Islamic law will likely be effective.

More environmental education and initiatives to improve ocean literacy are also required, especially among Malaysian youth who are disconnected from nature (Nathan *et al.*, 2019). We encourage parents and teachers to use the Phase-Recovery MCO (after 10<sup>th</sup> June, 2020) as an opportunity to take the classroom to the beach, where social distancing can still be practiced, and learn about the importance of conserving our natural environment and engage with sea turtle conservation. Many NGOs have also created online classrooms and virtual field trips to raise awareness of environmental issues. Engaging all demographics of the community with work of NGOs and government agencies is needed to conserve sea turtles.

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## IMPACT OF COVID-19 ON SEA TURTLE NESTING, CONSERVATION AND MANAGEMENT IN BANGLADESH

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In Bangladesh, the major sea turtle nesting season is in winter (October to March/April). The national lockdown in response to the COVID-19 pandemic began on 26<sup>th</sup> March 2020 and has, to date, continued throughout June. Within the lockdown period, human activity continued as many people are daily wage earners or operate small businesses, especially in major cities. In coastal areas, the lockdown was more strictly followed and there

was no tourism. Some fishing activities continued, although it was not supposed to during the lockdown.

The NGO Marinelife Alliance (MLA) runs a community-based research and conservation program involving local conservation assistants (CAs). All 56 CAs live in beach front villages along 350km of the southeast and south-central coast. They continued conducting night