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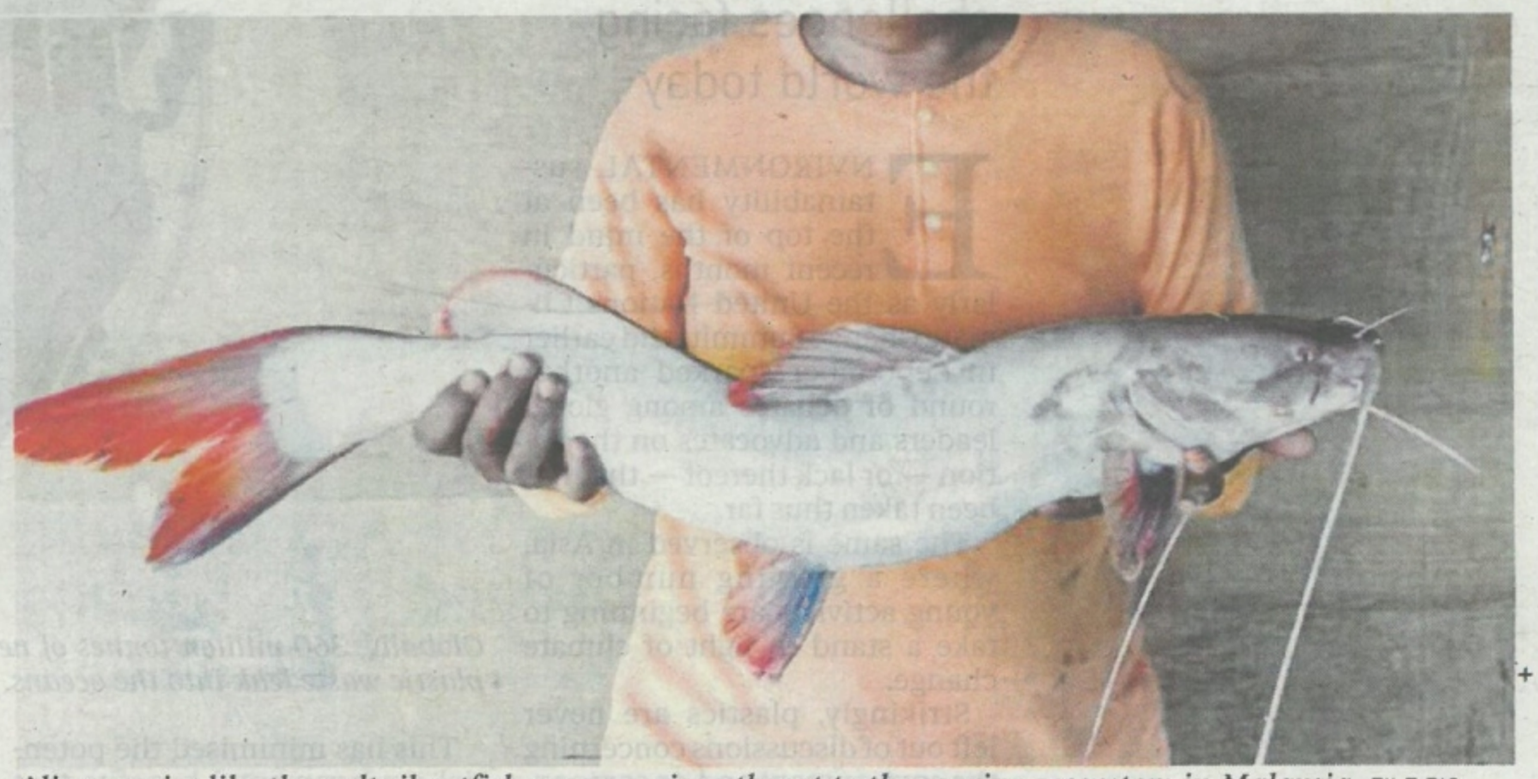
ALIEN SPECIES INVASION

TACKLING AN EMERGING BIODIVERSITY THREAT

Managing alien species invasion effectively is crucial to safeguarding our fragile biodiversity and ecosystem from irreversible damage



Alien species like the redtail catfish pose a serious threat to the marine ecosystem in Malaysia. FILE PIC

WE must applaud the government for finally allocating a handsome sum in funding for biodiversity and conservation efforts next year.

The RM48 million in funding is timely, thanks to our big mammal friends like tigers and tapirs that made the news headlines due to the dire state of their natural habitats.

Our biodiversity faces challenges such as climate change, pollution and habitat fragmentation.

But there's another silent yet equally intimidating way we could lose our biodiversity, which is through species invasion.

Invasive species are alien (or rather non-native) species that are introduced outside their native range to a point of displacing the native species in the areas they invade. They survive and establish their populations as there are no natural predators in the newly-invaded areas.

The transboundary translocation of the non-native species may be intentional, such as smuggling of prohibited fish, or unintentional, such as harmful algae released from transoceanic transfer of ballast water.

Spreading in silence, alien invasive species have adversely affected, for example, production of agricultural produce through notorious infestation by non-native pests and diversity of freshwater ecosystem through domination of invasive fish.

Species invasion has caused losses of US$120 billion a year in the United States alone (data for 2005) and A$13.6 billion in Australia (data estimated for 2014 to 2015). In light of this, Australia has invested about A$726 million of grants until 2016 to specifically curb species invasion through research and management.

For the record, there are more than 500 non-native or introduced alien species recorded in Malaysia, each of which has the invasiveness capability.

The prolific ones, to name a few, are the redtail catfish (Phractocephalus hemioliopterus), the alligator weed (Alternanthera philoxeroides), the water hyacinth (Eihhornia craassipes) and the black armyworm (Spodoptera exempts).

If the alien species invasion is unattended to, it is just a matter of time before we see many native species, of which some may be poorly known and understood to science, being extirpated from their local range. This in turn will diminish the ecosystem services they have evolved to provide.

As a signatory to the Convention on Biological Diversity, Malaysia had come up with a strategic plan for 2011 that will end in 2020.

On the strategic plan, measures to prevent species invasion are the 11th target.

However, with the strategic plan set to end next year, it seems that alien species invasion is still an alien topic to many in Malaysia.

At the current state of public knowledge and awareness, the country continues being invaded by new species, threatening native species in their natural environments. Whereas proactive measures have been clearly laid out, reactive plans appear slightly cloudy in sight.

At a local symposium on species conservation last year, a senior government officer mentioned that non-native species that establish themselves in our local environment are of naturalised species.

In the eyes of the officer, no resources should be channelled to curb them from further spreading as they are already here. He was not alone on this.

Later at a working group workshop on invasive species, another government officer echoed that sentiment. To them, because some of these non-native alien species are commercially important species, grading them as invasive would jeopardise the economy.

Well, that view may be skewed because managing invasive species and maintaining the industry related to the non-native species are two different things.

It is also appalling given the potential and irreversible damage these species can do to our ecosystems that may be more than the economic loss the industry would suffer in the long run.

More often that not, non-native species that establish new populations would later dominate an ecosystem, hence become invasive.

Their ability to adapt and spread quickly in a foreign range (in an environment they have not originally evolved in) tell us something that we have to seriously think about.

Before we know it, species diversity in our ecosystems become homogenised, consisting of a few and non-native ones.

Therefore, reactive plans are something that the government has to put equal effort on.

This is to account for non-native population establishment that may have slipped under the enforcers' belt at the border or through natural dispersal.

Of course that would involve funding to run programmes that include eradication programmes, public engagements and distributional range database development in our effort to combat non-native species that have established their populations here.

These are among the many important approaches we can pursue to conserve the biodiversity, protect our ecosystem and mitigate the effect of alien species invasion on our shores.

We hope to see the budget allocated being effectively disbursed to the respective ministry and agencies for this purpose.

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