



Ministerial Statement

By

The Hon. Walter Roban, JP, MP

Minister of Home Affairs

Friday, 19th May 2023

The Importance of mangroves to our biodiversity

Mr. Speaker, I rise today to inform this Honourable House of the importance and continuing need to protect Bermuda's mangroves.

I will start with an interesting fact, Bermuda is the most northerly point on earth where mangroves grow, thanks to the proximity of the warming waters of the Gulf Stream. These unique trees have, and will play a critical role in Bermuda's past, its present and its future.

Along with our endemic Bermuda Cedars and Palmettos, the island mangroves were the island's primary forests. These trees form dense coastal or pond-edge thickets and groves in low lying, salty coastal and marshy areas of the island, where their unique adaptations allow them to thrive.

There are two types of mangroves in Bermuda, the Black and the Red mangrove. Both types of mangroves grow in association with one another. The Red mangrove tends to grow closer to and in the water with their characteristic prop roots, while the Black mangrove grow more to the landward side of their habitat.

Mangrove forests have been described as the richest wetland resource in Bermuda, having high levels of biodiversity, second only to coral reefs. Furthermore, the terrestrial and aquatic components of the mangrove community support complex food webs and provide a unique habitat for a variety of rare animals. In Bermuda's ponds these include giant land crabs, green herons, killifishes, and diamondback terrapins - all of which are either native or endemic to Bermuda and protected under the Protected Species Act 2003. In Bermuda's waters, they act as a critical nursery for a whole host of Bermuda's fish species.

Mr. Speaker, mangroves also act as an important line of protection against coastal erosion. As I have stated in the past in this Honourable House, climate change, particularly rising sea levels, poses an outsized threat to Bermuda. This is due in part to the location, size and topography of our islands. It is also due to the recognition that the ocean which surrounds us is being disproportionately impacted by greenhouse gas emissions. The impact of this will include higher mean sea level and tides. Additionally, Bermuda faces the threat of major changes to the marine ecosystem.

The effects of climate change are a major threat to Bermuda, particularly the land we live on, especially low lying areas in the west and east ends. Many of these low lying areas are where the remains of Bermuda's historical mangrove swamps were and are located.

Looking to the future, Mangroves are going to continue to play an important role as a critical buffer to some of our most vulnerable low-lying areas which will play an important part in our future climate change adaption strategy. I look forward to updating this Honourable House on this in the near future.

Mr. Speaker, turning back to mangroves I am pleased to report that the Department of Environment and Natural Resources has recently completed an island-wide mangrove mapping project 2022, thanks to our new GIS Mapping Specialist, Mr. Daniel Dickinson, using a combination of satellite, aerial photography, drones and on-site ground truthing.

The geographical based survey estimates that Bermuda has fifty point eight (50.8) acres of mangroves, of which twenty-one point four (21.4) acres are located on Government owned land and twenty-nine point four (29.4) acres on privately owned land. The dominant species is comprised of the Red Mangrove making up sixty-four (64) percent; Black Mangrove made up twelve (12) percent; and the remaining twenty-four (24) percent were mixed stands of the two species. While mangroves only make up an estimated zero point zero zero four (0.004) percentage

of the island land mass their value for biodiversity and buffers for climate change far exceeds their size. In other words, mangroves punch way above their weight. With this in mind we need to take every action to ensure that we protect this important natural asset.

Mr. Speaker, while we have limited means to counteract damage caused by nature's wrath we can and should do our best to address human related threats, particularly over-zealous "pruning" or outright wanton destruction for short sighted human centred desires including views, convenience, and aesthetics. In fact, the Department of Environment and Natural Resources is currently investigating a major incident on the property of an exclusive private club, which has significantly impacted a large stand of protected mangroves.

Mr. Speaker, in the incident I just mentioned, a group of healthy mature red mangroves, about twenty very mature specimens, which were thirty to forty (30-40) foot high, were cut to four (4) foot stumps.

Unfortunately this was one area that the Department of Environment and Natural Resources noted as being one of the island's healthiest mangrove areas and even increasing in size, in contrast to many coastal areas.

This to me, in no way, shape or form, can be considered "routine maintenance". Unfortunately the DENR estimates perhaps ninety percent (90%)s of this mangroves ecological value is now gone. It could

not have been undertaken at a worse time for the protected Green heron, right in the middle of its nesting season. It will realistically take decades for the mangroves to grow back if they do at all.

Mr. Speaker, this is unacceptable! I can assure you that we will be pursuing charges and penalties against the offending entity, which will also include publicly naming and shaming them.

Mr. Speaker, I want to take this opportunity to re-emphasize to the public that Red and Black mangroves are Level Two protected species under the Protected Species Act 2003 and are afforded protection from willful damage, destruction or felling under section 9(1) (b) of the Act.

Under the act a moderate level of routine maintenance is allowed without a permit. This involves minor action which does not jeopardize the health of a protected species.

Property owners are strongly advised to reach out to the Department of Environment and Natural Resources for an assessment to clarify what level of maintenance they can undertake without a permit and/or how to request a permit if major works are needed. This advice also goes to landscapers and marine contractors.

Persons who do not have the approved authorization may commit an offense which is liable on summary conviction to a fine of fifteen thousand dollars (\$15,000) or one year of imprisonment.

Officers of the Department will be happy to assist and can be reached at telephone 236-4201 or at email - environment@gov.bm.

Mr. Speaker, in closing, there are likely those in our community who may think for the sake of development, profit or so called progress a lax approach should be taken to these matters. This is not the case for this Government. We've lost considerable acreage and parts of our biodiversity to numerous factors over the last century.

Preserving, protecting biodiversity is now a global priority not just a local one. Balance is necessary even as we protect what we have. What will not be tolerated is unwonted, inconsiderate, unlawful desecration of our natural environment that is protected under the Protected Species Act, or any other aspect of it. The government is prepared to take the strongest legal action necessary to protect every aspect of Bermuda's environment, land, sea or air.

Thank you, **Mr. Speaker**.