Employing Artificial Intelligence to Protect the Ras AL Hadd Turtle Reserve

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The industrial revolution impacts in ecosystem and animal's wild, while there are many organizations to protect this animal and environment from human’s behavior. However, Oman has variable environments which help the animals to growth, one of them is a turtle. Turtles face many issues such as fisher's behavior and predators. Green turtle is classified as endangered. This phenomenon inspires to solve this issue by using artificial intelligent. At first, the team meet and discuss all plans and strategies. Second, they build the project environment that include tourist's interne controller using password to manage and monitor the visitors by using Arduino program; build a wall along the reserve's beach to protect turtle babies to move far, robotic cleaner to clean up the beach by used EV3, robotic field guide and phone application for reserve's services which make easy to get any information about Ras Alhadd Reserve. According to Ras Al Hadd reserve's statistical report from 2011 until 2020 that the number of turtles approximately remained at 300000 from 2011 to 2019. However, in 2020 sharp increase to 500000 turtles. We observe that the number of the turtles remained during 2011 to 2019, while during Covid19 increases because of the visitors’ behavior, increase the jellyfish (turtle's feeds) and the sea was cold (due to reduce at industrial area) &lockdown. The Reserve will implement the idea of the wall because the workers at reserve consider its importance, as well phone application.

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