

Ecotourism and applying the concept of sustainability in interior design and furniture in Nabq Nature Reserve

Prof. Abdul Rahman Bakr

**Professor of Environmental Design, Department of Interior Design and Furniture,
Faculty of Applied Arts, Helwan University**

abdelrahman_hussein@a-arts.helwan.edu.eg

Prof. Ashraf Hussein

**Professor of Environmental Design, Department of Interior Design and Furniture,
Faculty of Applied Arts, Helwan University**

ashraf_abdelrahman@a-arts.helwan.edu.eg

Dr. Sara Fawzy Mustafa

**Lecturer, Department of Interior Design and Furniture, Faculty of Applied Arts,
Helwan University**

sarah_mustafa@a-arts.helwan.edu.eg

Researcher. Hala Barakat Abd El Fatah Barakat

**A Bachelor student in Interior Design and Furniture department at Faculty of Applied
Arts, Helwan University**

Hala4224@a-arts.helwan.edu.eg

Abstract:

The preservation of the environment is the basis for the survival and continuation of eco-tourism and its long-term sustainability, and since all kinds of nature reserves are important in vital areas that play a great role in preserving the biological diversity with all that it contains of living creatures, and protecting these organisms from the danger of extinction, and represent a large part in ecotourism, so their tourism image must be projected to the fullest through its various designs, including furniture, interior design, slogans, advertisements, and signs, while preserving it and its environment and not to expose it to damage, several principles are taken into consideration so that it does not cause a defect in that system, and in order to find the best way to highlight and preserve the identity of the protectorate, studies have been done on the Nabq Reserve as a natural example. This reserve was chosen due to its environmental diversity, as it is characterized by a mountainous desert environment with its sand dunes and valleys full of natural plants and wild and marine creatures. The application of the concept of sustainability and the use of local materials available in the reserve and recycled materials such as palm wastes, which are represented in "palm leaves, and operational waste" and the reason behind that; The presence of palm trees in abundance in this region and because palm tree is a "quick renewable material" because it is produced annually, the design reflects the general nature of the surrounding environment in an honest manner. The steps were applied to the designs of internal space and some pieces of furniture to be placed in the reserve to test the correctness of the steps that were reached.

Research problem:

It is difficult to develop an interior design for the Nabq Reserve without affecting it, because of the sensitivity of the environment, which requires a design with some specifications determined by the environment.

Research objective:

١)-Awareness of the importance of nature reserves as eco-tourism and that they are a source of inspiration for interior design.

٢)-Awareness of the role of the interior designer in preserving reserves and in expressing their identity in interior design and furniture.

٣)-Highlighting the importance of sustainable materials for the interior designer, like "palm leaf."

1- Natural Reserves:

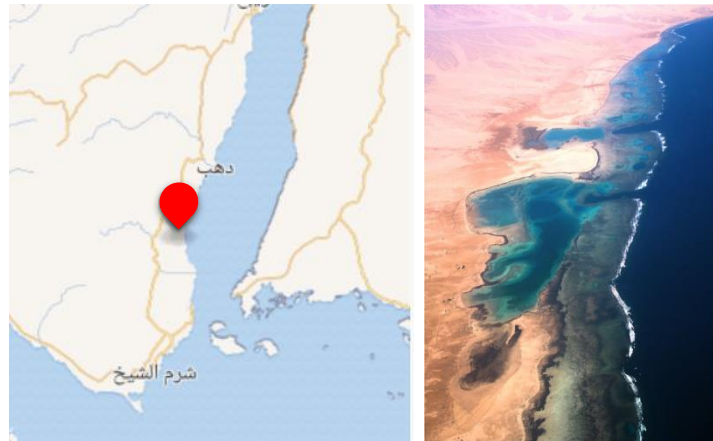
They are geographically defined areas, whether an area of land or coastal waters characterized by the presence of living organisms or valuable natural phenomena, on which protection is imposed under special laws to protect their content.

1-1 Nabq Reserve:

A multi-purpose reserve was declared as a reserve by Prime Minister Decision No. 1511 of 1992. The reserve is located between Taba, Sharm El Sheikh and Wadi Adawi Valley on the Gulf of Aqaba, and the area of the reserve is about 600 square kilometers, of which 440 square kilometers are on land, and 160 square kilometers in Water range.

1-1-1 Biodiversity:

Nabq is characterized by valleys abundant with natural plants and the bottom of the bay in this region is rich with many distinguished coral reefs, colorful fish, Snails, shrimp, crabs (transporting crabs) and shellfish, also wildlife are precious as there are deer, Nubian camels, foxes and many types of rodents and reptiles, in addition to many migratory birds such as seagulls.



(Pic: 1) Nabq reserve location



Transporting crab

Anemone fish



Mangrove Trees

Palm Trees

(Pic: 2) Biodiversity in Nabq Reserve

1-1-2 Habits and traditions of the population in Nabq Nature Reserve:

Residents of the village of Khurayza live near Ras Muhammad, and Nabq protectorates live between two mountains of high altitude, most of them are sheltered in wooden huts made from natural trees and inlaid with panels. A few of them built a home for themselves using cement bricks.

1-1-3 What distinguishes the reserve?

The reserve is considered the focus of attention of many tourists, who love nature and wildlife, and scuba diving in the waters surrounding the reserve to see coral reefs, and the wonderful marine life around it.

The slogan of the reserve is: "Don't take anything with you And don't leave anything behind".

٢-Tourism in the reserve:

2-1 Ecotourism:

It is a group of activities that aim to preserve the natural cultural heritage also it is environmentally friendly tourism, and it was defined as: It is traveling to natural areas where pollution was not affected and its natural balance was not subjected to imbalance and to enjoy its scenery and its animals, plants and civilization in the past and present.

2-2 Sustainable Tourism:

It is "optimal use of natural resources, including sources of biodiversity, mitigating the effects of tourism on the environment and culture, and maximizing benefits from environmental protection and local communities."

2-3 Sustainable tourism development:

Ecotourism was the most affected by the concept of sustainability: it deals directly with natural data, and the reserves were a top priority for this type of tourism. The sustainable tourism development is "the development of natural reserves and the provision of essentials for tourism in them and all that the tourism process requires without harming these reserves.", and taking into consideration the integrity of the environmental and biological diversity and its various life support systems."

3- How to apply in interior design and furniture?

The tourism picture plays an important role in the tourism growth of a region, and the tourist image of a place can be achieved through design, whether in interior design or furniture design, and that is by applying the following:

- 1- Optimizing the local resources and the natural potential of the site.
- 2- The image should be honest, so that the interior design and furniture reflect the general nature of the surrounding environment.
- 3- To be authentic, to reflect the nature of the local community, its handicrafts, its distinctive products, and others.

4- The use of innovative treatments and forms that suit the location and climate with homogeneity and complementarity of the detailed features to create a distinctive and unique character and personality.

١-٣ Local resources for the site:

One of the local resources of Nabq Reserve is palm trees, and hence the trend will be to utilize the palm waste; This will make it a step towards achieving sustainability as palm groves are considered a "fast renewable material" because it is produced annually: the palm tree is distinguished by its association with the identity of the local environment, the idea is based on optimizing the quantities of agricultural waste for palm trees and preserve the environment.

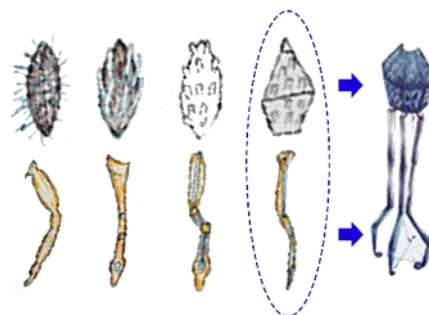
4- Application (some works that were inspired by the reserve):

4-1 Multi-use lighting unit:

A lighting unit that can be used in several ways. It can be used as a floor lighting unit (such as a lantern), a wall-mounted lighting unit, or a vertical lighting unit. The design lines were extracted from the shape of the transporting crab, while holding "urchin" which defends itself with thorns and lives in the Nabq Nature Reserve.



(Pic: 4)
Various modes of lighting unit



(Pic: 3)

Analysis of lines sketches to reach the final form

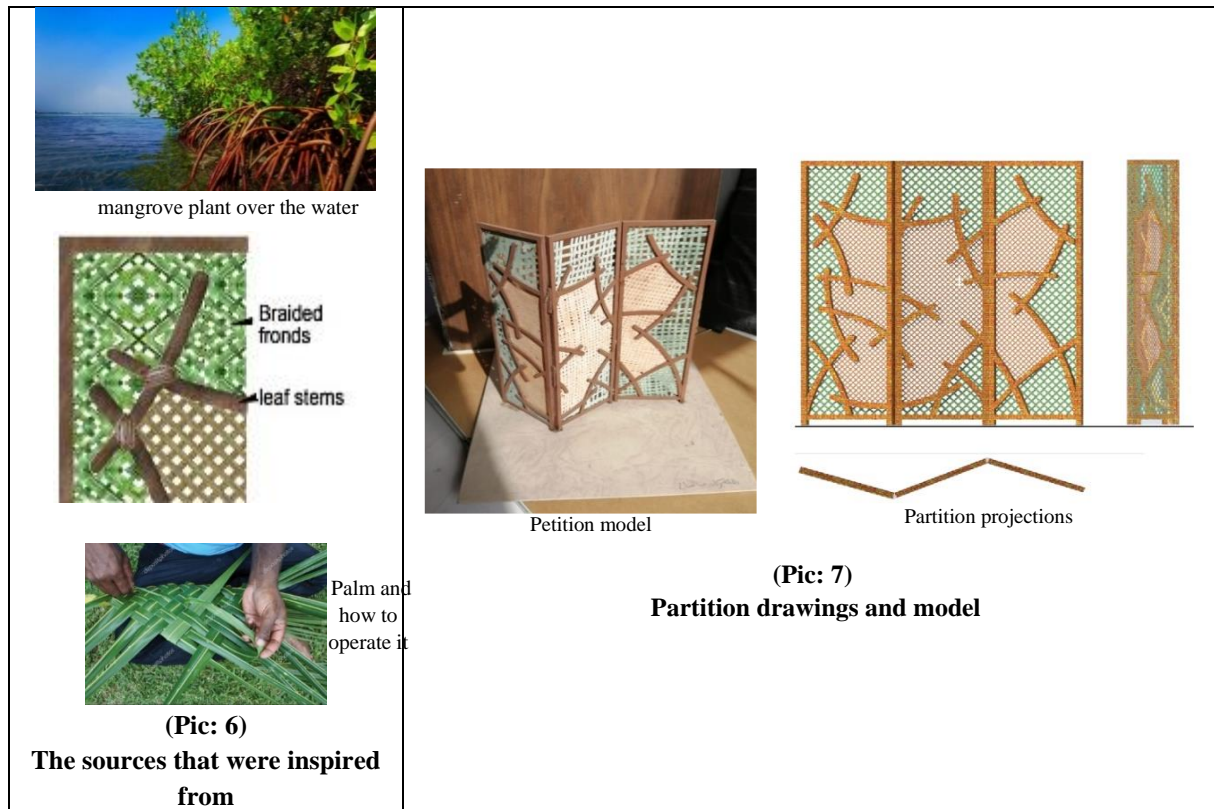


(Pic: 5)

Some imaginative pictures of using

4-2 Partition of palm fronds:

Partition can be used in the reception area of the reserve or any room in the buildings of the reserve. The lines were inspired by the entanglement of the mangrove plant, which is one of the most famous plants in the reserve and the flowing movement of palm leaves and also the use of environmentally friendly materials, which are - palm leaves - Palm fronds - Ropes for fastening.



Research results:

From the above we conclude that:

- 1- Natural reserves have a tourist value that must be developed.
- 2 - If the term sustainable tourism development is applied, this will lead to the development of natural reserves and the preservation of the environment of the reserve without any negative impacts, which helps in the continuation of those reserves to fulfill their roles and maximize their environmental and tourist benefits without wasting the rights of future generations, and also creating available opportunity for ecotourism and enjoying the nature of the reserve without affecting it.
- 3- The interior designer has a large and effective role in preserving the reserve with sustainable designs, and also has a role in highlighting the identity and nature of the reserve in its various forms, whether environmental or otherwise.
- 4- Recycled auxiliary materials, including (palm waste), are considered among the sustainable materials desirable to be used in natural reserves and in various places due to their positive aspects.

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