IUCN Conservation Outlook Assessment 2014 **(archived)**
Finalised on 08 September 2014

Please note: this is an archived Conservation Outlook Assessment for Pitons Management Area. To access the most up-to-date Conservation Outlook Assessment for this site, please visit https://www.worldheritageoutlook.iucn.org.

Pitons Management Area

SITE INFORMATION

Country:
Saint Lucia
Inscribed in: 2004
Criteria:
(vii) (viii)

Site description:

The 2,909-ha site near the town of Soufriere includes the Pitons, two volcanic spires rising side by side from the sea (770 m and 743 m high respectively), linked by the Piton Mitan ridge. The volcanic complex includes a geothermal field with sulphurous fumeroles and hot springs. Coral reefs cover almost 60% of the site’s marine area. A survey has revealed 168 species of finfish, 60 species of cnidaria, including corals, eight molluscs, 14 sponges, 11 echinoderms, 15 arthropods and eight annelid worms. The dominant terrestrial vegetation is tropical moist forest grading to subtropical wet forest, with small areas of dry forest and wet elfin woodland on the summits. At least 148 plant species have been recorded on Gros Piton, 97 on Petit Piton and the intervening ridge, among them eight rare tree species. The Gros Piton is home to some 27 bird species (five of them endemic), three indigenous rodents, one opossum, three bats, eight reptiles and three amphibians. © UNESCO

SUMMARY

2014 Conservation Outlook

Significant concern

The conservation outlook for the values related to volcanic features and geological processes is good as these are robust and little affected by human activities. The outlook for the aesthetic values of the property is of high concern and is declining because of poorly controlled development within the site. The pressure from tourism and housing development coincides with the absence of a structured and enforced development control system and is aggravated by limited financial and technical management capacity. The full implementation of the LAC study will be essential to ensure the protection of the site's OUV. Protection and management is, however, effective for the marine component.

Current state and trend of VALUES

High Concern
Trend: Data Deficient

The degradation of the aesthetic values of the Property is caused mainly by the construction of homes and resorts on the slopes of the Pitons. The physical attributes related to volcanic features and geological processes are not threatened. Together the current state of the site's values can be assessed as "high concern".

Overall THREATS

Very High Threat

The Pitons Management Area is one of the smallest natural World Heritage properties which currently faces a combination of development pressure associated with tourism and housing. Road construction and associated quarrying, and occasional timber extraction and charcoal burning increase erosion and the transport of sediments into the near shore marine environment. Multiple effects of climate change represent another critical threat facing the

PMA.

Overall PROTECTION and MANAGEMENT

Some Concern

The property faces a combination of tourism and housing development pressures which coincide with the absence of a structured and enforced development control system and is aggravated by limited financial and technical management capacity. The recently completed LAC study provides important guidance for the management of the site, particularly with respect to the development pressures, thus the complete implementation of the study’s guidelines will be essential for the protection of the site’s values. Protection and management is, however, effective for the marine component.

FULL ASSESSMENT

Description of values

Values

World Heritage values

▶ **Superlative natural beauty**
Criterion:(vii)

The Pitons Management Area derives its primary visual impact and aesthetic qualities from the Pitons, two adjacent forest-clad volcanic lava domes rising abruptly from the sea to heights greater than 700m. The Pitons provide a distinctive landmark for seafarers. The combination of the Pitons against the backdrop of green tropical vegetation and a varying topography combined with a marine foreground gives the area its superlative beauty. (28COM.14B.11.PitonsMA.Inscription)

▶ **Volcanic features**
Criterion:(viii)

The Pitons Management Area contains the greater part of a collapsed stratovolcano contained within the volcanic system, known to geologists as the Soufriere Volcanic Centre. Prominent within the volcanic landscape are two eroded remnants of lava domes, Gros Piton and Petit Piton. The Pitons occur with a variety of other volcanic features including cumulodomes, explosion craters, pyroclastic deposits (pumice and ash), and lava flows. Collectively, these fully illustrate the volcanic history of an andesitic composite volcano associated with crustal plate subduction. (28COM.14B.11.PitonsMA.Inscription)

Other important biodiversity values

► Marine habitats

The Marine Management Area within the PMA is a coastal strip 11 km long and about 1 km wide. It comprises a steeply sloping continental shelf with fringing and patch reefs, boulders and sandy plains. The coral reefs, which cover almost 60% of the nominated marine area, are healthy and diverse. A survey to a depth of 20 m revealed 168 species of finfish, 60 species of cnidaria including corals, 8 molluscs, 14 sponges, 11 echinoderms, 15 arthropods and 8 annelid worms. Hawksbill turtles are seen inshore, and whale sharks and pilot whales offshore (IUCN Evaluation. 2004).

► Terrestrial species of conservation concern

At least 148 plant species have been recorded on Gros Piton and 97 on Petit Piton and the intervening ridge. Among these are several endemic or rare plants, including eight rare species of tree. Some 27 bird species, including 5 endemics, are known from Gros Piton, along with 3 indigenous rodents, 1 opossum, 3 bats, 8
reptiles and 3 amphibians. The endemic St Lucia anole Anolis luceae, St Lucia pygmy gecko Sphaerodactylus microlepis, St Lucia boa Constrictororophias, and St Lucia viper (or fer-de-lance) Bothrops caribbaeus occur (IUCN Evaluation, 2004; IBA Information Sheet).

► International Bird Area

This IBA is important for its population of the Endangered St Lucia Black Finch Melanospiza richardsoni, and for the 14 (of the 23) Lesser Antilles EBA restricted-range birds that occur (including the Near Threatened St Lucia Oriole Icterus laudabilis). The endemic subspecies of Lesser Antillean Flycatcher Myiarchus oberi santaeluciae and House Wren Troglodytes aedon martinicensis also occur. A small but
regionally important population of Royal Tern Sterna maxima breeds here. (IBA Information Sheet).

Assessment information

Threats

Current Threats

Very High Threat

The Pitons Management Area is one of the smallest natural World Heritage properties which currently faces a combination of development pressure associated with tourism and housing. Road construction and associated quarrying, and occasional timber extraction and charcoal burning increase erosion and the transport of sediments into the near shore marine environment. Multiple effects of climate change represent another critical threat facing the PMA.

▶ Tourism/ Recreation Areas

Very High Threat
Inside site
Outside site

The construction of vacation homes and resort on the slopes of the iconic Pitons are degrading aesthetic values and threatening the OUV of the property. While a moratorium on development is theoretically in place, strict conditional approvals have been granted for developments that would enhance the tourism product. Now that the Limits of Acceptable Change Study has been completed and gives clear recommendations about the acceptability of proposed and future developments, it will be essential that these recommendations are fully obliged by and existing plans revised to meet the requirements. The recommendations of the LAC study were endorsed by Executive Order (Cabinet Conclusion No. 527 of 2013) and outlined a road map for implementation of the report (IUCN, Evaluation, 2004; IUCN Mission Report, 2010; 36COM.Pitons.SPreport; SOC Report 2013; SOC Report 2014).

► Roads/ Railroads

Very High Threat
Inside site
Outside site

Road construction and associated quarrying, small scale subsistence farming, and occasional timber extraction and charcoal burning increases erosion and the transport of sediments into the near shore marine environment. This in turn negatively affects reef environments by contributing to coral mortality. (IUCN Evaluation, 2004; IUCN Mission Report, 2010)

► Droughts, Storms/Flooding, Chemical changes in oceanic waters

Very High Threat

The impacts of climate change are cumulative for both terrestrial and marine environments. Terrestrial environments are affected by increased frequency and severity of droughts, fires, tropical storms and hurricanes, the latter causing flooding and wind damage. Marine environments, and especially coral reefs, are negatively affected by ocean acidification, which contributes to coral mortality; periodic coral bleaching events caused by rises in sea temperatures; and increased frequency and severity of tropical storms and hurricanes leading to increased runoff and sedimentation; and physical damage by wave action and storm surge. (IUCN Evaluation, 2004; IUCN Mission Report, 2010)

► Solid Waste

Low Threat
Inside site

The disposal of solid wastes along the coastline has a negative impact on the aesthetics of the Property. (IUCN Evaluation, 2004).

► Fire/ Fire Suppression

Low Threat
Inside site

Because of a particularly dry season, several bush fires occurred within the property. A large fire occurred in 2010, devastating part of the hill above the Sulphur Springs. This threat periodically affects the property’s backdrop of

green tropical vegetation and could become more important due to climate change (Mission Report 2010).

Potential Threats

Protection and management

Assessing Protection and Management

► Integration into regional and national planning systems

Mostly Effective

The Property is well integrated into the national planning framework, and a regional plan to integrate the development of the PMA and surrounding region has been developed. (IUCN Mission Report, 2010; PMA - Soufrière Region Integrated Management Plan, 2008; PMA Management Plan, 2003)

► Relationships with local people

Some Concern

The complexity of management arrangements for the Property is reflected in the complexity of relationships with local people and the diverse range of interests. These are particularly confusing and fragmented for the terrestrial component of the Property. This is in contrast to the marine component where management arrangements are clear, stakeholders regularly participate in management decisions, and enforcement is effective. (IUCN Mission Report, 2010)

► Legal framework and enforcement

Serious Concern

The legal framework for the terrestrial component of the Property is complex and confusing, and according to some stakeholders, enforcement is arbitrary and also subject to political influence. This contrasts with the marine component that has a clear legal framework and sound enforcement. (IUCN Mission Report, 2010; PMA - Soufrière Region Integrated Management Plan,

2008; PMA Management Plan, 2003)

► Management system

Serious Concern

Management of the PMA is guided through a statutory PMA Management Plan. Implementation is based on the inputs of a large number of government departments and stakeholder groups. In practice, however, the Plan has failed to address the requirements for sustainable development of the PMA. A subsequent Integrated Development Plan and Specific Development Guidelines for the Property have not halted the construction of unsightly and intrusive buildings in critical areas. (IUCN Mission Report, 2010)

► Management effectiveness

Serious Concern

Management effectiveness for the terrestrial component is low because of the fragmentation of responsibilities, the lack of effective coordination, and political pressure. Management of the marine component is effective. (IUCN Mission Report, 2010; PMA - Soufrière Region Integrated Management Plan, 2008; PMA Management Plan, 2003)

► Implementation of Committee decisions and recommendations

Mostly Effective

Some Committee decisions have been implemented, while others have not. The Moratorium on development within the PMA has only partially been met. The study to determine the Limits of Acceptable Change, to review land use plans and development and control guidelines has been completed and needs to be fully implemented by the State Party. A draft statement of OUV has been submitted as has a report on the state of conservation of the property. (36COM.PitonsMA.SPreport; Pitons MA .Agreement, MPDE-IUCN, 2011; IUCN Mission Report, 2010; SOC Report 2014).

► Boundaries

Highly Effective

The boundaries of the Property are clear and mapped. (IUCN Mission Report, 2010; PMA - Soufrière Region Integrated Management Plan, 2008; PMA

Management Plan, 2003)

► Sustainable finance

Some Concern

Finance for management activities is provided indirectly by the government through the allocations to the various government agencies and committees that are part of the management structure. This is not enough, however, to cover an integrated approach to management. (IUCN Mission Report, 2010; PMA - Soufrière Region Integrated Management Plan, 2008; PMA Management Plan, 2003;

► Staff training and development

Serious Concern

The PMA is still inadequately staffed.

► Sustainable use

Serious Concern

A number of new structures, both legal and illegal, are negatively impacting the OUV of the property and thus are uses that are unsustainable. The construction of new resorts that have received Cabinet approval in principle would further add to the problem. (IUCN Mission Report, 2010)

► Education and interpretation programs

Some Concern

Importance of raising awareness and providing better educational opportunities been recognised and there are plans to improve current provisions.

► Tourism and interpretation

Data Deficient

Data on tourism and interpretation is deficient.

► Monitoring

Some Concern

Monitoring of the marine component of the Property is carried out on a regular basis by the staff of the Soufriere Marine Management Association (SMMA)
Data is deficient with respect to monitoring of the terrestrial component.

► Research

Some Concern

Research on the marine component is promoted and coordinated by the SMMA, and carried out by external researchers. (SMMA website).

Data is deficient with respect to research in the terrestrial component of the property.

Overall assessment of protection and management

Some Concern

The property faces a combination of tourism and housing development pressures which coincide with the absence of a structured and enforced development control system and is aggravated by limited financial and technical management capacity. The recently completed LAC study provides important guidance for the management of the site, particularly with respect to the development pressures, thus the complete implementation of the study's guidelines will be essential for the protection of the site's values. Protection and management is, however, effective for the marine component.

► Assessment of the effectiveness of protection and management in addressing threats outside the site

Some Concern

An Integrated Development Plan for the PMA and Soufriere Region was developed in 2008, but has not been implemented. The IUCN Monitoring Mission of 2010 found that there was no unifying vision for sustainable development of the region, nor mechanisms in place to address threats from outside the region. (IUCN Mission Report, 2010; PMA - Soufrière Region Integrated Management Plan, 2008).

► Best practice examples

The setup and functioning of the Soufriere Marine Management Association provides good examples of best practice with respect to stakeholder participation and coordination, marine zoning, public outreach, law enforcement, and monitoring in the small island context.

State and trend of values

Assessing the current state and trend of values

World Heritage values

► Superlative natural beauty

Critical
Trend:Deteriorating

The natural beauty of the Property is negatively affected by the construction of vacation homes and resorts on the slopes of the Pitons. While a moratorium on development is theoretically in place, strict conditional approvals have been granted for developments that would enhance the tourism product. Though the development of regulations and guidelines for new construction is underway, they have not yet been adopted nor implemented. Aesthetic values are also affected, though much less so, by small scale farming, timber extraction, charcoal burning, fires, and grazing by goats.
(IUCN, Evaluation, 2004; IUCN Mission Report, 2010; 36COM.Pitons.SPreport).

► Volcanic features

Good
Trend:Stable

The physical attributes of the PMA that relate to earth’s history and geological processes are not threatened.

Other important biodiversity values

► Marine habitats

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regionally important population of Royal Tern Sterna maxima breeds here. (IBA Information Sheet).

Summary of the Values

► Assessment of the current state and trend of World Heritage values

High Concern

Trend: Data Deficient

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► Assessment of the current state and trend of other important biodiversity values

Data Deficient

Trend: Data Deficient

Data regarding the severity and trends of degradation of the marine environment, especially coral reefs, and the conservation status of terrestrial species of conservation concern is deficient. The conservation of marine habitats is not a primary objective for management of the property, per se, but rather is an indirect objective because it contributes to the maintenance of the aesthetic values of the marine component of the Property. Road, housing, and resort construction, small scale subsistence farming, and occasional timber extraction and charcoal burning all expose soils, increase erosion, and facilitate the transport of sediments into the near shore marine environment. This in turn negatively affects reef environments by contributing to coral mortality. Marine environments, and especially coral reefs, are also negatively affected by climate change, especially through ocean acidification, which contributes to coral mortality; periodic coral bleaching events caused by rises in sea temperatures; and greater severity and frequency of tropical storms and hurricanes leading to increased runoff and sedimentation and physical damage by wave action and storm surge. However, data regarding the severity and trends of these threats is deficient. (IUCN, Evaluation, 2004; IUCN Mission Report, 2010)

Additional information

Key conservation issues

▶ Degradation of the natural scenery through the construction of homes and resorts.

Local

On land, the natural scenery is threatened mainly by the construction of residences and resorts. (IUCN, Evaluation, 2004; Mission Report, 2010)

▶ Destruction of marine habitats, especially coral reefs

Local

Construction (roads, houses and resorts), small scale subsistence farming, and occasional timber extraction and charcoal burning all disturb soils, leaving them open to erosion and increased runoff and sediment transport into near shore marine environments. This negatively affects reef environments by contributing to coral mortality. Marine environments, and especially coral reefs, are also negatively affected by climate change, especially through ocean acidification, which contributes to coral mortality; periodic coral bleaching events caused by rises in sea temperatures; and greater severity and frequency of tropical storms and hurricanes leading to increased runoff and sedimentation and physical damage by wave action and storm surge. (IUCN, Evaluation, 2004; Mission Report, 2010)

Benefits

Understanding Benefits

▶ Outdoor recreation and tourism

The iconic PMA is a major tourism attraction for St. Lucia and the Caribbean that draws tourists from many parts of the world, and is a key element supporting economic development. (IUCN Mission Report, 2010; PMA -

Soufrière Region Integrated Management Plan, 2008; PMA Management Plan, 2003)

► **Sacred natural sites or landscapes**

The Pitons are an iconic feature of St. Lucia that stimulates national pride amongst its citizens. (IUCN Mission Report, 2010; PMA - Soufrière Region Integrated Management Plan, 2008; PMA Management Plan, 2003)

Summary of benefits

Tourism and national pride are the major benefits associated with the PMA. This has the double benefit of feeding both economic development and national identity.

Projects

Compilation of active conservation projects

№	Organization/ individuals	Project duration	Brief description of Active Projects
1	.		.

REFERENCES

№	References
1	28COM.14B.11.PitonsMA.Inscription
2	IUCN Evaluation, 2004