



Agenda Item: CEP 9c
Presented by: United States,
Argentina, Chile,
Norway, Spain,
United Kingdom,
ASOC, IAATO,
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Proposed Amendment for Antarctic Treaty Site Guidelines for Visitors Baily Head, Deception Island

Attachments:
atcm36_att074_e.doc: Revised Baily Head SGV,
atcm36_att075_e.pdf: Revised map for Baily Head SGV;
atcm36_att076_e.jpg: Photo 1 Penguin Highway

Proposed Amendment for Antarctic Treaty Site Guidelines for Visitors Baily Head, Deception Island

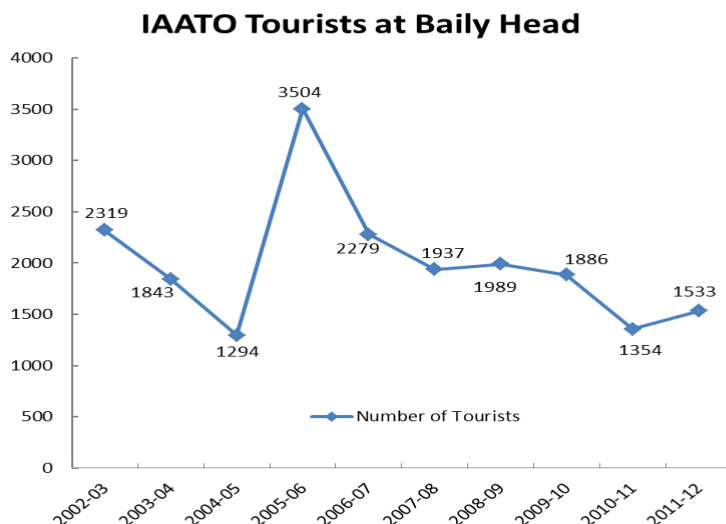
Summary

The Deception Island Management Group was prompted to review the Site Guidelines for Visitors to Baily Head following the report of a significant (>50 %) decline in the abundance of chinstrap penguins breeding at Baily Head since the last comprehensive census in 1986/1987. The research concluded that this decrease in abundance is most likely related to numerous and complex effects of climate change as chinstrap colonies throughout the region are declining. Deception Island Management Group wanted to ensure that the guidance provided in the Site Guidelines for Visitors was still appropriate given the changes in the colony. The Deception Island Management group also used the review as an opportunity to decrease redundancy between these site specific Site Guidelines for Visitors and the General Guidelines for Visitors to the Antarctic. We recommend that the CEP endorse the revised Site Guidelines for Baily Head, Deception Island.

Background

Chinstrap colonies throughout the Antarctic Peninsula are declining. The decline is wide spread and is correlated with increasing temperatures. Therefore climate change appears to be driving the declines, rather than site specific stressors (Lynch et al. 2012). The chinstrap penguin colony at Baily Head, Deception Island is the largest Chinstrap colony in the Antarctic Peninsula region. It too, has suffered a dramatic decline of at least 50% of breeding pairs since the 1980s (Naveen et al. 2012; Barbosa unpublished data) The chinstrap penguins at Vapour colony, located on the South west side of Deception Island, receive very few visitors, so few in fact that IAATO does not report it as one of the approximately 150 Peninsula sites visited each year by IAATO members. Vapour colony has declined by approximately 36% since 1991. This further supports the hypothesis that a common regional scale factor (such as changing predator and prey populations in response to climate change), rather than a site specific factor (such as visitation) is driving the declines (Barbosa 2012).

As the largest chinstrap colony in the Antarctic Peninsula, Baily Head attracts a number of visitors each year from IAATO member companies, private expeditions and National Antarctic Programs. IAATO regularly and reliably reports visitor numbers. In the last 10 years, Baily Head has been in the top 20 visited sites only once, during the 2002-2003 season. The wide interest in the colony and consistently moderate level of visitation prompted the creation of the first Site Guidelines for Visitors for Baily Head in 2009.



Currently, there is no indication that visitation has contributed to the decline of the chinstrap colony at Baily Head. However, the Deception Island Management Group recognizes that visitation has the potential to add stress to an already declining population. In light of this, the Site Guidelines for Baily Head were revised to reduce the potential of visitation to cause disturbance. The text was clarified so that the penguin highway along the melt stream is highlighted. This melt stream passes through a narrow corridor which serves as the primary visitor access to viewing the colony. Careful guiding is required in this area to ensure that visitors do not disturb the birds. Further, the passenger to guide ratio has been reduced from 20:1 to 15:1 to make it easier for guides to closely supervise the visitors. A new map has been drafted to better highlight the melt stream. This has now been more explicitly noted in the guidelines. Several other minor revisions have been made to reduce duplication between the Baily Head Site Guidelines for Visitors and the General Guidelines for Visitors to the Antarctic. All revisions are shown as ‘tracked changes’ to the currently adopted text.

Recommendation

The Deception Island Management Group believes that the revisions to the Site Guidelines for Visitors to Baily Head improve management of the site and will reduce the potential for visitors to stress the birds. The Deception Island Management Group will, however, continue to keep the site guidelines for this particular site under close review considering the degree of environmental changes being observed at the site, desiring to ensure the best possible management at Baily Head also in the future. We recommend that the CEP endorse the revised Site Guidelines for Baily Head.

References

- Barbosa, A, J. Benzal, A. De León, J. Moreno. 2012. Population decline of chinstrap penguins (*Pygoscelis antarctica*) on Deception Island, South Shetlands, Antarctica. *Polar Biology* (2012) 35:1453–1457
- Lynch, H.J., R. Naveen, P.N. Trathan and W.F. Fagan. 2012. Spatially integrated assessment reveals widespread changes in penguin populations on the Antarctic Peninsula. *Ecology* 93(6): 1367-1377.
- Naveen, R., H. J. Lynch, S. Forrest, T. Mueller, and M. Polito. 2012. First direct, site-wide penguin survey at Deception Island, Antarctica, suggests significant declines in breeding chinstrap penguins. *Polar Biology* 35 (12): 1879-1888.