SCAR Tourism Action Group (Ant-TAG)

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Information Paper submitted by SCAR

Summary

The SCAR Tourism Action Group (Ant-TAG) was approved at the Standing Committee on the Humanities and Social Sciences (SC-HASS) Business Meeting in November 2021. Ant-TAG provides an umbrella under which SCAR researchers and practitioners can make new connections, become aware of other existing projects, and pool existing expertise to provide guidance on important and relevant issues related to Antarctic tourism. Input from interested researchers of all disciplines is welcomed. Planned outputs are aimed at strengthening connections between academics, policy-makers, industry, and the public, enabling the group to make accurate and up-to-date recommendations relating to the practice of tourism in the region. Ultimately, the newly-formed Ant-TAG will strengthen SCAR’s capacity to provide timely guidance and input to the CEP and ATCM on Antarctic tourism matters.

Background

Tourism is an important activity in the Antarctic region, with visitation steadily climbing in recent years up to a total of 74,400 people in the 2019-20 season (pre-COVID19) (IAATO, 2020). Polar tourism is a significant area of research across the humanities and social sciences and has relevance for related disciplines such as ecological and environmental sciences. Much existing scholarship has an Arctic focus, so there is a need to consolidate Antarctic expertise in one location. The coronavirus pandemic and ongoing climate change impacts make this work more urgent than ever as polar tourism faces significant changes and challenges. The International Workshop on Antarctic Tourism in Rotterdam in 2019, and the recommendations that emerged from the workshop (ATCM XLII WP19 *Antarctic Tourism Workshop, 3-5 April in Rotterdam, The Netherlands: Chair’s Summary and Key Recommendations* and IP26 *Proactive Management of Antarctic Tourism: Time for a Fresh Approach*) detail contemporary challenges identified pre-pandemic. As new stakeholders, practices and infrastructure emerge, policy-makers will require objective advice on the challenges ahead for tourism activities and operations in Antarctica.

Work Package 3 of the SCAR project ‘The Impact of Covid-19 on Antarctica’ outlined challenges associated with Antarctic tourism (Nielsen et al., 2022) including operational constraints related to logistics, staff availability, potential introduction of zoonotic diseases, and changes in health protocols. COVID-19 offers opportunities related to tourism and conservation monitoring and management – it is a chance to rethink the way in which tourism has developed in Antarctica and to propose adaptive and comprehensive approaches to its management. Meanwhile, an international seed project engaging researchers from six universities across four continents was formed in 2020 with support from the Academic Consortium for the 21st Century (AC21). The AC21 Project aimed to build a prototype collaborative research network, facilitate short-term collaborations, and formulate a proposed research agenda for Antarctic tourism based on a horizon scan with input from the larger community. AC21 project outputs to date include Cajiao et al. (2021) and Tejedo et al. (2022). The SCAR Ant-TAG emerges out of these two projects at a critical juncture, when Antarctic tourism is on the agenda as researchers and nations turn their attention to the practices and management of Antarctic tourism.

The Tourism Action Group (Ant-TAG) harnesses the range of expertise in SC-HASS and across other SCAR groups on tourism topics, serving as a platform for researchers from different disciplinary perspectives to work together collaboratively and make evidence-based recommendations. These include discussion on how climate change affects tourism operations, tourist activities, decision-making and risk and subsequent human footprint in the future; tourist profiles and motivations; emerging markets, modalities and diversification of tourism activities; connections between Antarctic gateway cities; emerging Antarctic tourism policy; and how tourism can be an effective conservation tool by creating advocates for Antarctica or inspiring new pro-environmental behaviours when tourists return home. By exploring future scenarios for Antarctic tourism and analysing the impacts on a range of stakeholders, Ant-TAG will make timely contributions to policy discourse and the future management of the Antarctic Tourism industry.

Key aims of Ant-TAG over the coming four years (2021-2025) are to:

1. Integrate, prioritize, and implement research agendas derived from the two precursor projects (AC21 and SCAR COVID-19 project) and critical research needs raised by other scholars with regards to Antarctic tourism research, research that intersects with tourism, and tourism in the post-COVID-19 world;
2. Facilitate research collaboration among Ant-TAG members and other relevant SCAR groups in order to create policy-ready advice for SC-ATS and the Antarctic Environments Portal;
3. Establish a communication platform with IAATO and other stakeholders for translating research into management recommendations and addressing industry-relevant knowledge gaps; and
4. Collate research-based, policy-ready information on the topic of Antarctic tourism for SC-ATS to present to the ATCM and CEP.

Trends and Challenges in Antarctic Tourism Practice, Management and Regulation

Key areas that require closer attention include:

Diversification and Growth

Antarctic tourism has increased and diversified during the last decades. Activities on offer include experiences such as kayaking, scuba diving, paddle boarding, snow-shoeing and camping. The diversity of tourism activities and their geographical and temporal spread (including lengthened tourism seasons and push to travel further south) may increase the risk to human and environmental safety and the need for considered risk management, education, and decision-support strategies. Risk-related tourism can also be developed (or opposed), with adventure tourism already prominent for Antarctica and the possibility for more diversity through disaster tourism (Kelman and Dodds, 2009). The range of specialised activities requires specialist staff to deliver the product, raising challenges for the future of the tourism workforce and logistics support. When coupled with the growth of the tourism industry, diversification can lead to a wider range of impacts in and around Antarctica. Growth in tourism numbers and changes in workforce and environment increase the risk of adverse events due to human behaviour, poor risk perception, and decision errors. Therefore, understanding the decision-making, leadership, teamwork, and educational needs of Antarctic tourism operators and opportunities for increasing the efficiency and safety of operations is important.

Tourist and Tourism Operator Profiles

Tourism diversification also means the diversification of tourists’ and tourism operators’ expectations, motivations, and profiles, including the risks they are willing to take, and their risk management approaches. Emerging markets could potentially introduce changes in the way tourism operations have been conducted in the Antarctic, which needs to be further examined. A better understanding of new tourists’ and tourism operators’ profiles, needs, and markets would enable us to make timely recommendations to the industry if the aim is to use tourism as a tool for conservation. Changes in the market, visitor profiles, and operator profiles also raise questions about shifting behaviours and decisions on the ground. Youth-based education expeditions have been offered for more than two decades; Hehir et al, (2020) suggest youth can return as inspired and empowered ambassadors and go on to have environmentally-focused careers. However, further research is needed to understand what impact Antarctic expeditions have on their participants’ subsequent lifestyle decisions and pro-environmental behaviours. Tourist and tourism operator profiles should therefore be examined in tandem with the wider Antarctic workforce.

Impacts

Despite a total of 313 tourist sites being reported by IAATO in 2019 (IAATO, 2019), tourist activities are highly concentrated in a small number of sites around the Antarctic Peninsula Region. Moreover, the co-location of the tourist and the breeding season and other life cycle stages (i.e., moulting) of several wildlife species has raised concerns about negative environmental interactions and impacts (Barbosa et al., 2013; Cajiao et al., 2022). The current lack of data on cumulative impacts as well as the absence of comprehensive and long-term monitoring programmes has created a gap in the understanding of the actual positive and negative effects of tourism activities on the local ecosystems (Tejedo et al., 2022). Another aspect of impacts relates to responding to tourists in difficulty, whether from a volcanic eruption (Erebus, Deception Island), a ship sinking, or an expedition experiencing a major injury. What impacts emerge from diversion of resources for search-and-rescue operations, emergency responses, costs, litigation, and materials left behind such as a downed aircraft? Researchers can also investigate what impacts result from post-emergency aspects of disasters such as investigation (Vennell, 1981), memorialisation (Mika and Kelman, 2020), and disaster tourism (Kelman and Dodds, 2009). This impacts priority has relevance for the CEP 5-year plan and the ATCM Multi-Year Strategic Work Plan in relation to tourism monitoring.

Policy Challenges

Policy challenges relate to permitting and the intersection between (top-down) governance and (industry-led) management of Antarctic tourism, and relate to both the terrestrial and marine realms (Sykora-Bodie et al, 2021). IAATO collates the most comprehensive information on tourism locations and activities but there is a current lack of an independent central location to collate tourism information and regulation. While the Ant-TAG seeks to coordinate this within SCAR, the suggestion that the ATCM establish a permanent Tourism Advisory Group (TAG) with a dedicated and continuing focus on tourism issues (Cajiao et. al, 2021) would help address this challenge at a higher level. As most Antarctic tourism vessels are registered in non-AT signatory states, there is a need to examine stronger port-state jurisdiction as well as impacts of the Polar Code and wider IMO requirements. A further challenge involves devising effective ways of reaching out to small private expeditions to the Antarctic, e.g., on yachts and curtailing entrance into the ATS area without proper permissions (Hemmings, 2012). Overall, there is a need to enhance compliance of extant regulations and to move from a more reactive to a more proactive management (Soutullo and Rios, 2020).

Social License

The concept of social licence is likely to be increasingly central to the governance of the Antarctic tourism industry in coming years, inflected by both environmental and health concerns, including direct human impact, carbon emissions and COVID-19. Social licence can be understood as the “tacit permission that communities and societies may grant for industry or government to utilise or control a resource” (Kelly, Pecl and Fleming 2017). In the Antarctic context, where there are no local permanent inhabitants to directly observe the impact of tourism, media representation of the industry is a key factor in determining community attitude. Particular attention should also be paid to the Gateway Cities that act as departure points for tourist vessels and experience direct economic and social impacts. Researchers need to measure public sentiment regarding Antarctic tourism, analyse media representation of the industry and investigate the influence of concepts such as the “Antarctic ambassadorship” (Alexander et al., 2019).

Future Vision

Changes in the fleet, such as new vessels entering the market, and products, such as chartered aircraft for landings, are already having implications for where tourists can go and when. Similarly, climate change will impact the Antarctic operating environment and infrastructure and have implications for accessibility, risk and safety (human and environmental). Operators will need to be adaptable and resilient. The absence of a vision on tourism by the ATPs is a key challenge. When looking forward to Antarctic futures, scenario planning is helpful (Frame, 2019). It is also important to consider ways to maximise the positive impacts of tourism, including education, science support, citizen science, monitoring, risk management, and emergency response. This includes creating inclusive and welcoming environments for tourists, researchers, and those back home. Investigating ways to foster connections with Antarctica from afar (for instance, from Antarctic Gateway Cities and via polar museums and research organisations) is key to supporting a sustainable future for Antarctica as a continent.

Next steps

In order to address these challenges in a coherent manner, Ant-TAG has proposed the following outputs over the coming four years. Key Ant-TAG activities with relevance for the CEP and ATCM include development of a report on the future of Antarctic tourism, based on peer-reviewed scholarship that will be presented at the SCAR Open Science Conference. We envision that these outputs will be produced or established within the period of the Action Group (2021-2025).

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| **Publication** | **Peer-reviewed paper** examining policy impacts of Antarctic Tourism research, and associated public outreach, making a scholarly contribution to the fields of Antarctic Studies and Tourism Studies. |
| **SC-ATS Advice** | **Report** for SC-ATS on possible Antarctic Tourism Futures – links contemporary research to the policy arena, creating impacts in the ATCM and CEP forums. |
| **Environments Portal** | **Antarctic Environments Portal** submission on current issues in Antarctic tourism. |
| **SC-HASS Conference** | **Tourism Research stream** at SC-HASS Conference – draw together a wider range of researchers and raise the profile of this area of work while supporting future collaborations and developing the best available research teams. |
| **Operations Workshop** | **Operations workshop** to facilitate smoother connections between researchers and potential industry hosts. This activity builds capacity amongst researchers by opening alternative ways to access Antarctica as a research site and providing opportunities to understand the research needs and logistics of industry. |
| **Practitioner Exchange Platform** | **Practitioner exchange platform**. Scope steps to develop a tool to support increased communication between practitioners and researchers, and the opportunity to identify common areas of interest for future projects. This sub-group will pilot the platform connections via a webinar series connected to the SCAR conference activities. |

The Ant-TAG co-leads (Dr Hanne Nielsen, Dr Yu-Fai Leung, Dr Gabriela Roldán and Dr Daniela Cajiao) welcome further input from researchers with an interest in this area who wish to contribute. Interested researchers can find out more via the SCAR website. <https://www.scar.org/science/ant-tag/home/>

References

Alexander, K.A., Liggett, D., Leane, E., Nielsen, E.F., Bailey, J.L., Brasier, M.J., & Haward, M. (2019). Who and what is an Antarctic ambassador? *Polar Record, 55*(6): 497-506.

Barbosa, A., De Mas, E., Benzal, J., Diaz, J.I., Motas, M., Jerez, S., Pertierra, L., Benayas, J., Justel, A., Lauzurica, P., Garcia-Peña, J.F., & Serrano, T. (2013). Pollution and physiological variability in gentoo penguins at two rookeries with different levels of human visitation. *Antarctic Science 25: 329-338.*

Cajiao, D., Leung, Y.-F., Tejedo, P., Barbosa, A., Reck, G., & Benayas, J. (2022). Behavioural responses of two penguin species to human presence at Barrientos Island, a popular tourist site in the Antarctic Peninsula region. *Antarctic Science*, *13*, 1–13. <https://doi.org/10.1017/s0954102021000559>

Cajiao, D., Benayas, J., Tejedo, P., & Leung, Y.-F. (2021). Adaptive management of sustainable tourism in Antarctica: A rhetoric or working progress? *Sustainability, 13*, 7649. <https://doi.org/10.3390/su13147649>

Frame, B. (2019). A Typology for Antarctic futures. *The Polar Journal*, *9 (1):* 236-246. <https://doi.org/10.1080/2154896X.2018.1559015>

Hemmings, A.D. (2012). The Antarctic Treaty System. *New Zealand Yearbook of International Law, 10*, 237-243.

IAATO (International Association of Antarctica Tour Operators). (2019). A Catalogue of IAATO Operator Activities (ATCM, IP 145).

IAATO (2020). Tourism statistics-IAATO. Retrieved September 19, 2020, from <https://iaato.org/tourism-statistics>

Kelman, I., & Dodds, R. (2009). Developing a code of ethics for disaster tourism. *International Journal of Mass Emergencies and Disasters*, *27*(3), 272-296.

Kelly, R., Pecl, G.T., & Fleming, A. (2017). Social licence in the marine sector: A review of application and understanding. *Marine Policy, 81*, 21-28.

Mika, K., & Kelman, I. (2020). Shealing: Post-disaster slow healing and later recovery. *Area*, *52*(3), 646-653.

Nielsen, H., Cajiao, D., Roldan, G., Benayas, J., Herbert, A., Leung, Y.-F., Tejedo, P., & Dinica, V. (2022). Is COVID-19 helping or hindering effective management of Antarctic Tourism? *Polar Perspectives*, No. 10 (March 2022). [https://www.wilsoncenter.org/sites/default/files/media/uploads/documents/Polar Perspectives No. 10\_COVID-19 in Antarctic.pdf](https://www.wilsoncenter.org/sites/default/files/media/uploads/documents/Polar%20Perspectives%20No.%2010_COVID-19%20in%20Antarctic.pdf)

Sykora-Bodie, S. T., Álvarez-Romero, J. G., Adams, V. M., Gurney, G. G., Cleary, J., Pressey, R. L., & Ban, N. C. (2021). Methods for identifying spatially referenced conservation needs and opportunities. *Biological Conservation, 260*, 109138.<https://doi.org/10.1016/j.biocon.2021.109138>

Soutullo, A., & Rios, M. (2020). Sustainable tourism in natural protected areas as a benchmark for Antarctic tourism. *Antarctic Affairs, 7*, 45-52.   
<http://antarcticaffairs.org/wp-content/uploads/2021/02/04-6.pdf>

Tejedo, P., Benayas, J., Cajiao, D., Leung, Y.-F., De Filippo, D., & Liggett, D. (2022). What are the real environmental impacts of Antarctic tourism? Unveiling their importance through a comprehensive meta-analysis. *Journal of Environmental Management*, *308*, 114634. <https://doi.org/10.1016/j.jenvman.2022.114634>

Vennell, M.A. (1981). Report of the Royal Commission to Enquire into The Crash on Mt Erebus, Antarctica of a DC10 Aircraft operated by Air New Zealand Limited. *Air and Space Law*, *6*(4), 254-259.