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International Teaching Aid Competition 2023

Reconnoitering Innovative Ideas in Postnormal Times

iTAC 2023

iTAC 2023
INTERNATIONAL TEACHING AID COMPETITION
E-PROCEEDINGS

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PREFACE

iTAC or International Teaching Aid Competition 2023 was a venue for academicians, researchers, industries, junior and young inventors to showcase their innovative ideas not only in the teaching and learning sphere but also in other numerous disciplines of study. This competition was organised by the Special Interest Group, Public Interest Centre of Excellence (SIG PICE) UiTM Kedah Branch, Malaysia. Its main aim was to promote the production of innovative ideas among academicians, students and also the public at large.

In accordance with the theme "Reconnoitering Innovative Ideas in Post-normal Times", the development of novel ideas from the perspectives of interdisciplinary innovations is more compelling today, especially in the post-covid 19 times. Post-pandemic initiatives are the most relevant in the current world to adapt to new ways of doing things and all these surely require networking and collaboration. Rising to the occasion, iTAC 2023 has managed to attract more than 267 participations for all categories. The staggering number of submissions has proven the relevance of this competition to the academic world and beyond in urging the culture of innovating ideas.

iTAC 2023 committee would like to thank all creative participants for showcasing their innovative ideas with us. As expected in any competition, there will be those who win and those who lose. Congratulations to all the award recipients (Diamond, Gold, Silver and Bronze) for their winning entries. Those who did not make the cut this year can always improve and join us again later.

It is hoped that iTAC 2023 has been a worthy platform for all participating innovators who have shown ingenious efforts in their products and ideas. This compilation of extended abstracts published as iTAC 2023 E-Proceedings contains insights into what current researchers, both experienced and novice, find important and relevant in the post-normal times.

Best regards,

iTAC 2023 Committee
Special Interest Group, Public Interest Centre of Excellence (SIG PICE)
UiTM Kedah Branch
Malaysia

THE APPLICATION OF RECREATIONAL OPPORTUNITY SPECTRUM (ROS) FOR ZONING SYSTEM IN TAMAN EKO RIMBA SUNGAI BANTANG, JOHOR

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ABSTRACT
Recreational Opportunity Spectrum (ROS) is a commonly employed tool for managing a wide range of outdoor recreational options. It operates on the principle that factors like accessibility and the visitors' impacts could significantly influence the recreational experience. This project aims to develop a management plan for Taman Eko Rimba Sungai Bantang, Johor, Malaysia by determining the ROS classification to preserve and conserve natural resources. Primary data collection was collected through observation and focus group interviews according to the three settings: resources, social and managerial. Therefore, three classes of ROS were identified in the case study that comprised one zones in roaded natural classes and the other two zone in the semi-primitive non-motorized classes. Based upon the identification of the ROS classes, three zones were formulated to direct the planning and managing of the place for maximizing the recreational experience among visitors. Zone 1 known as "The Hidden Knowledge", a roaded natural area that has unique semi-urban settings as the naturalness of the area is low but the opportunities for facilities development are engaging. Next, Zone 2 with the theme; "Stroll on the Wild Side" is a semi-primitive non-motorized area and the focus of this zone is the resource settings with two different spectrums that provide habitats for wildlife and landscape elements. Lastly, Zone 3 is called as "Walk with Gaia" zones and this area has a high level of naturalness and very low opportunities for social interaction. The identification of the different zones would lead to the development of relevant recreational activities for enhancing visitors' experience while preserving nature. The application of ROS in managing parks has proven to be a useful tool in ensuring that the parks meet the diverse needs of visitors.

Keywords: recreational opportunity spectrum, natural resources, park management plan, park planning

INTRODUCTION

The Recreational Opportunity Spectrum (ROS) is a widely used tool in the management of diverse outdoor recreational opportunities. The concept is based on the assumption that various factors such as ease of access and user density, contribute to the recreational experience (Manning, R.E., 2011). According to Parkin D. (2000), ROS is a conceptual framework designed to help clarify the relationships between recreational settings, activities and experiences. It was first used by the United States Department of Agriculture Forest Service in the late 1970s. The framework utilizes biophysical, social and managerial attributes to describe recreational sites. The ROS ranges from isolation paired with a sense of challenge, some risk-taking, and self-reliance, to the opposite extreme of feeling safe, comfortable and having the opportunity to socialize with people (Parkin, D., 2000).

Figure 1. The classification of ROS

AIM OF THE STUDY

This study aims to determine the classification of the Recreational Opportunity Spectrum (ROS) in Taman Eko Rimba Sungai Bantang, Johor, with the goal of formulating a management plan for preservation and conservation of natural resources.

METHODOLOGY

Secondary data analysis was conducted to support the reliability of the study and involved the literature review from academic journals, earlier research, and guidelines from the National Forest Policy of 1978, the Wildlife Conservation Act of 2010, and other reliable sources.
Primary data collection, which is done through a first-hand source, is the first technique that has been used. This method has been used in various ways, including observational, interview, and survey methods. During a site visit, the observation method was carried out at Taman Eko Rimba Sungai Bantang in order to observe and record determinants identified in the site according to the managerial, social and resources setting.

On October 11 until October 13, 2022, researchers gathered resources inventory in the area. Additionally, gathering resource inventories is essential because it provides accurate information about the planning area and is necessary for making the best decisions. In terms of the interview technique, we have conducted interviews with representatives from the local community including respondents from Majlis Pengurusan Komuniti Kampung Melayu Baru Bekok, Ahli Dewan Undangan Negeri Bekok, Ahli Majlis Bekok, and non-government organizations. At the same time, structured questionnaires were distributed among visitors of Taman Eko Rimba Sungai Bantang and 254 respondents were successfully evaluated during the process.

CASE STUDY: TAMAN EKO RIMBA SUNGAI BANTANG, JOHOR

Taman Eko Rimba Sungai Bantang is located within the Labis Forest Reserve and is in Compartment 17 with an area of 210.93ha and Compartment 18 with an area of 156.28ha. The distance between Sungai Bantang Waterfall and Segamat town is approximately 64 km. And 8 km from Pekan Bekok. Various activities can be carried out including jungle trekking, camping and picnics.

Taman Eko Rimba Sungai Bantang is located in a rainforest of Hutan Lipur Sungai Bantang which are in the mukim of Bekok, Segamat District, Johor. This recreational forest was first founded in 1989 and developed immensely in 1990. The site is part of the Labis Forest Reserve and is divided into two compartment which are Compartment 17 (210.93ha) and Compartment 18 (156.28ha) as shown in the site plan above. Taman Eko Rimba Sungai Bantang is located approximately 64 kilometres from the Segamat town and 8 kilometres from Pekan Bekok.

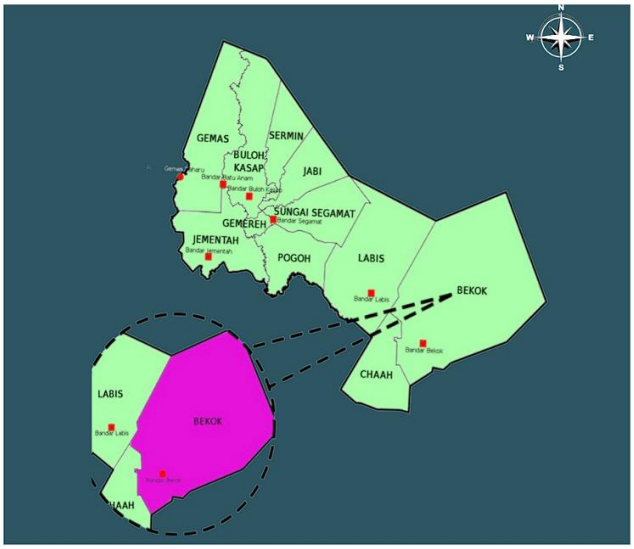

Figure 2. Location plan of Taman Eko Rimba Sungai Bantang, Johor

FINDING & DATA ANALYSIS

The Recreation Opportunity Spectrum (ROS) is a classification and management system that was designed in order to organize leisure activities according to three criteria which are the resources setting, the social setting, and the managerial setting. In a social setting, our company discuss a topics such as the interaction between visitors, the visitors' experiences, the visitors' participation in activities, and the visitors' social behavior. Therefore, three classes for ROS classification were identified in the case study which are one zone is in roaded natural class and two zones are in the semi-primitive non-motorized class.

For Zone 1 with the name “The Hidden Knowledge”, the roaded natural area has significant visitors appeal due to the presence of some developments with picturesque surroundings and an urban setting nearby. The naturalness in the area is at a low level resulting from activities of facilities development but still maintaining the natural areas. Opportunities for facilities development is important as well in order to ensure the maximize the visitors’ experience. The social setting in zone 1 is determined by the visitors' interaction opportunities and the area provides open spaces for visitors to gather and perform recreational activities such as camping and picnic. As the naturalness of the area are still maintained, and equipped with facilities, thus this zone is a suitable spot for any social-based activity such as community work and art of nature exhibition.

“Stroll on the Wild Side” is a given name for Zone 2 with semi-primitive non-motorized as the ROS class identified. This area focused in terms of resource settings with two different spectrums that attract wild life, and natural areas and are surrounded by trees and water and serve as their habitat. Next, visitor engagement, experience, density, and social conduct make up the social environment spectrum. Due to the area's lack of attractions, tourist interaction is moderate. In terms of the managerial setting, as there are only limited facilities found in the area, the recreational opportunities were also limited with a moderate level of naturalness. However, the zone is a perfect area to organize nature-based activity such as insect hunter where participants could experience in catching insects in the area and taking photos.

Lastly, Zone 3 was identified as semi primitive non-motorized area with the name “Walk With Gaia”. This zone has a high level of naturalness and low social interaction possibilities. The area has potential for nature-based activity such as forest exploration. Due to the availability of visitors and attractions in the area, there is a high likelihood of social behaviour being observed or directly observed in the area. As the characteristic of the area is more towards natural, the facilities provided are very limited thus limiting the recreational activities opportunities for visitors. This zone requires low level of maintenance works as the natural areas aimed to be preserved to facilitate the natural heritage of the area.

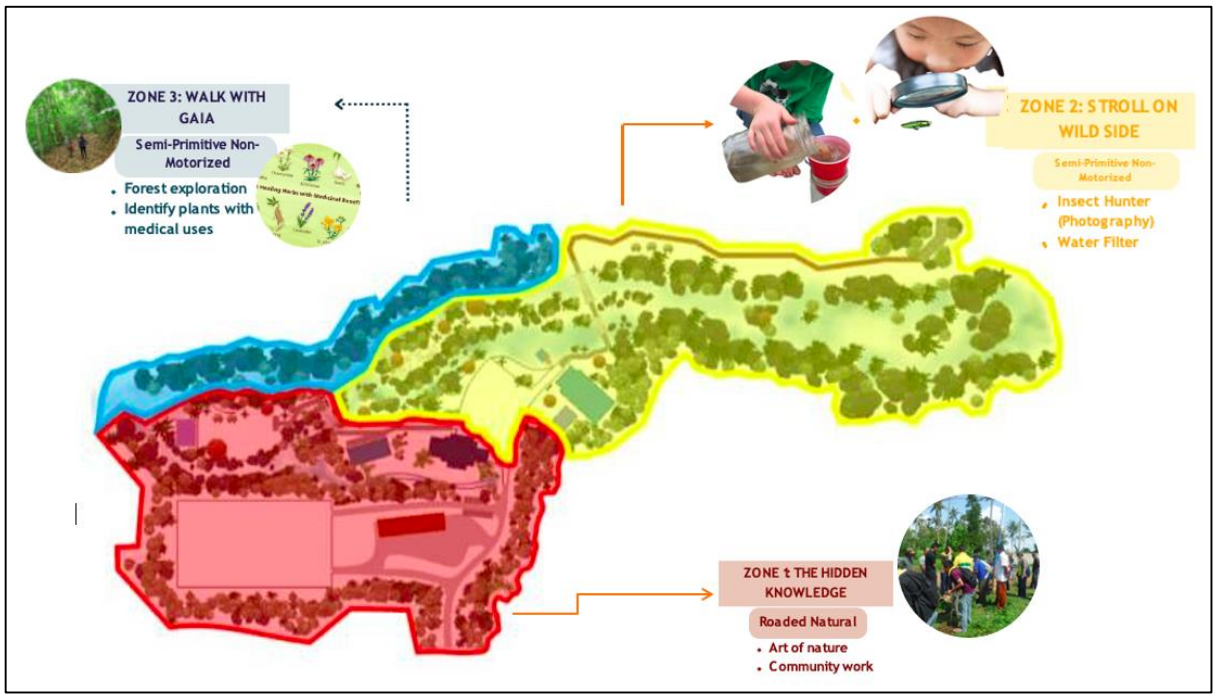

Figure 3. Proposed zoning system for Taman Eko Rimba Sungai Bantang

CONCLUSION

In conclusion, the application of the ROS in managing parks has proven to be useful tool in ensuring that the parks meet the diverse needs of visitors while also maintaining the integrity of natural resources. The ROS provides a framework for classifying recreation opportunities based on their challenge, environmental impacts and social interaction. By considering the full range of opportunities, park managers can develop a balanced approach to park planning and management that takes into account the needs and preferences of all visitors, while minimizing the negative impacts on the environment. By using ROS in park management, we can ensure that parks continue to provide valuable opportunities for recreation and enjoyment, while also preserving the natural resources that make them so special.

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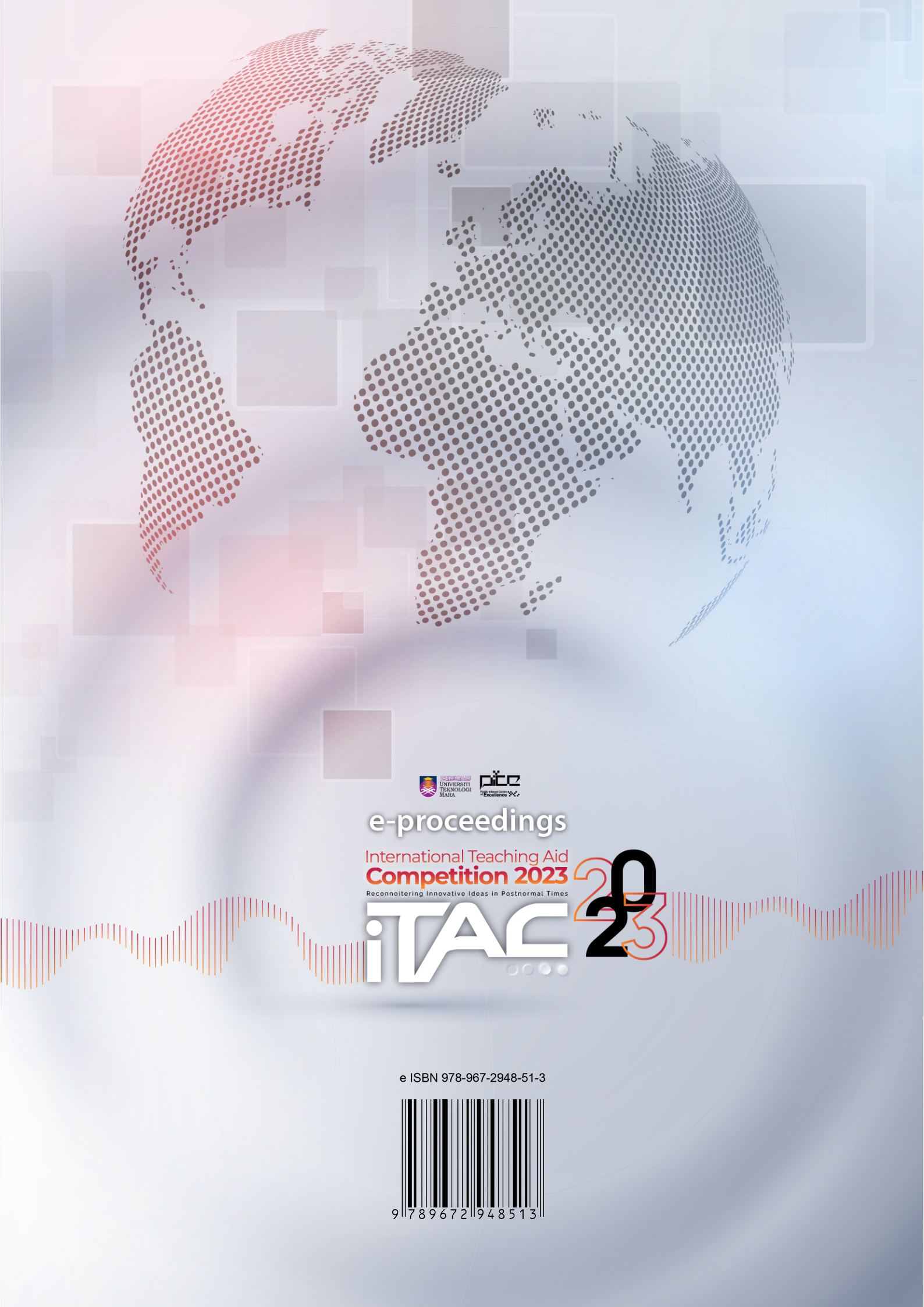

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