



CARNARVON
ASTRO GUIDES
TO DARK SKIES AND BEYOND

ASTRO-TOURISM

IMPLEMENTATION GUIDE

CARNARVON EXPERIENCE



This guide outlines version 1 of the Carnarvon Experience as conceptualised by the Carnarvon Astro-Guides in training

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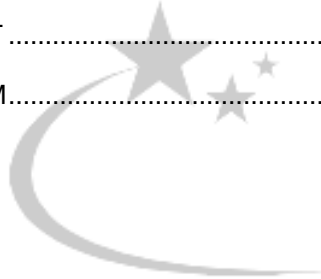
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1. INTRODUCTION

Astronomy tourism offers a unique and captivating experience, allowing visitors to explore the wonders of the universe while promoting scientific literacy and appreciation for our place in the cosmos. The night sky has fascinated humanity since time immemorial, and with advances in technology and accessibility, astronomy has become increasingly popular among people of all ages and backgrounds. Whether it is witnessing a meteor shower, observing distant galaxies through a telescope, or learning about celestial objects from knowledgeable experts, astronomy tourism provides an opportunity to connect with the awe-inspiring beauty and vastness of the universe. By implementing astronomy tourism initiatives thoughtfully and responsibly, Carnarvon will not only contribute to attracting visitors and boosting the local economy, but also foster scientific curiosity, environmental stewardship, and cultural exchange.

However, developing an effective astronomy tourism program requires careful planning, collaboration, and consideration of various factors. This guide provides an outline of the initial concept that was developed by the engaged Astro-Guides in training for Carnarvon in the Northern Cape, South Africa. The purpose of the guideline is to create a foundation for a successful astronomy tourism experience; the Carnarvon Astro Experience™.

2. TARGETED AUDIENCE

The audience targeted for the Carnarvon Astro Experience™ will include any and all members of the South African public, as categorised by the National Government, as well as any and all foreigners that enter the borders of South Africa for the purpose of tourist activities and/or business purposes.

Due to safety considerations, it is suggested that the target group will include individuals between the ages of 5 and 75 that are considered physically abled. That being said, no interested party will be denied an experience, however, this will affect the available service offerings accordingly.

For optimal crowd control, tourist and minimum guide ratios will be allocated as follows:

1 to 5 People	2 Astro-Guides
6 to 10 People	3 Astro-Guides
10+ People	6 Astro-Guides

3. LOCATIONS

4. TOURISM BOOKINGS

A formal booking system is important for events as it enables efficient reservation management, enhances customer convenience, facilitates real-time equipment management, and provides secure payment processing. It is a valuable tool for Astro-Guides to optimise their operations, enhance customer experiences, and drive business growth. Bookings for the Carnarvon Astro Experience will be made directly by tourists through one of the following platforms:

WhatsApp®	
Online Booking Form	
Printed Booking Form	

Although preferred Astro-Guide selections are allowed, it is noted that Astro-Guides operate on rotation to ensure a fair and equitable process. Therefore, selections will only be considered with sufficient motivation.

The booking form is attached as Annexure A and must be completed in full to confirm a booking. The completed booking form must be submitted at least 24 hours before the required event unless agreed with the Astro-Guides on rotation. An event will only be confirmed on receipt of the booking form, duly signed indemnity forms, and payment confirmation.

The bookings will be made at the risk of tourists. Since significant planning is invested in the event, only a 50% refund will be granted for any event that is cancelled with a 24 to 48-hour notice and a 0% refund will be granted for any event that is cancelled with less than a 24-hour notice. A full refund will be granted for cancellations that are made more than 48 hours in advance.

5. SERVICE OFFERINGS

Diverse service offerings are important for the Carnarvon Astro Experience to meet varied tourist needs, enhance tourist satisfaction, expand the market reach, and adapt to emerging trends. The Carnarvon Astro Experience is a night-time experience and will be based on one of the following service offerings, with the option of experience customisation:

!Xam Sky viewing		
<u>Inclusions:</u> Sky-viewing with telescope Dark-sky tour Indigenous story-telling	1 – 5 People	Cost TBC
Boesman Loop (Walk)		
<u>Inclusions:</u> Dark-sky tour Indigenous story-telling Hand and foot massage with traditional !Xam medicinal herbs	1 – 5 People	Cost TBC

Hare		
<u>Inclusions:</u> Sky-viewing with telescope Indigenous story-telling Family fun Snacks and sweets	4 – 8 People (Families)	Cost TBC
Canopus		
<u>Inclusions:</u> Sky-viewing with telescope Indigenous story-telling Traditional cuisine (light meal)	5 – 8 People	Cost TBC
Waterslang		
<u>Inclusions:</u> Sky-viewing with telescope Dark-sky tour Indigenous story-telling	6 – 20 People	Cost TBC
Khoi Experience		
<u>Inclusions:</u> Dark-sky tour Riel or traditional dance A traditional donkey car ride	10 – 20 People	Cost TBC
Customisation: Add-On		
Hot Chocolate and Marshmallows	Per person	
Sherry	Per person	
Red Wine	Per person	
Ginger Beer	Per person	
Traditional Cuisine (Light Meal)	Per person	
Traditional Dance	Price on Request	
Special Events (Engagements / Gender Reveals)	Price on Request	

It is noted that daytime experiences can also be booked with guides. Since these are mostly seasonal, enquiries need to be directed to the Astro-Guides. A standardised programme is still under development.

6. MARKETING STRATEGY

Marketing plays a crucial role in promoting and attracting visitors to Astro-tourism, the guides and their service offerings to create awareness, attract the targeted audience, establish differentiation and competitive advantage, building trust and credibility, and facilitating repeated business.

5.1. Social Media Footprint

Social media is important for marketing due to its wide reach, targeted advertising capabilities, brand-building potential, word-of-mouth marketing, content distribution opportunities, customer insights, and relationship-building capabilities. It has become an essential component of a comprehensive marketing strategy, enabling initiatives to connect with their target audience, amplify their brand message, and drive business growth. The Astro-Guides will develop and manage social media pages and/or handles on the following platforms as part of its initial marketing campaign:

Facebook	Linked-In
Twitter	Tick-Tock

5.2. Marketing Campaign

In addition, the Carnarvon Astro Experience should be marketed on the following area-specific platforms:

Carnarvon	
Korbeeltjie Print Media	Collaboration with municipality to place advertisements and service offerings
Noord Wester Print Media	Articles on services through journalist engagement
	Paid advertisers
Public Spaces	Road-side printed advertisements or posters
	Pamphlets and/or posters at libraries and museums
Social Network	Pamphlets at schools, churches and other social institutions
	Advertisements at special events, such as Fly-In, Pan Run, Bowling, Carnarvon Annual Bash, other
Guesthouse Network	Pamphlets
Social Media Network	Advertisement or page sharing to FB Carnarvon Nuus, Carnarvon Tourism Info, National Tourism Info
	Advertisement or page sharing to WhatsApp Groups

Regional, Namaqua and Pixley Ka Seme and Northern Cape	
Regional and Provincial Print Media	Collaboration with municipality to place advertisements and service offerings in newsletters
	Articles on services through journalist engagement on Network24 (Ulrich Hendriks)
Regional and Provincial Broadcast Media	[RSG] Sterre en Planete
	Sterre en Planete (Hennie Maas)
Public Spaces	Road-side printed advertisements or posters
	Pamphlets and/or posters at libraries and museums
	Pamphlets and/or posters at airports
Social Network	Pamphlets at schools, churches and other social institutions
	Advertisements at special events, such as August Flowers, Africa Burn, Tankwa Camino, Mountain Biking Events, other
Guesthouse Network	Pamphlets
Stakeholder Network	Department of Science and Innovation public events
	NRF-SARAO science engagement events

5.3. Resource Development

To enable the marketing campaigns, the following resources will be developed:

- Pamphlets to be developed as per the specifications of the Department of Economic Development and Tourism
- Posters to be developed as per the specifications of the Astro-Guides and NRF-SARAO.
- Carnarvon Astro Experience Info Cards, containing social media links and contact details.
- Astro-Tourism Tab to be developed and integrated into the NRF-SARAO website.
- Periodic implementation videos for Youtube, Facebook and Tick-Tock Shorts.
- Periodic public interest articles on guides and Astro tourism for publishing/placement.

7. HEALTH AND SAFETY

Health and safety during events are essential to protect tourists' well-being, meet legal and ethical responsibilities, mitigate risks, prepare for emergencies, maintain a positive reputation, and comply with industry standards. Prioritising health and safety ensures tourists can fully enjoy their experiences with peace of mind, and it demonstrates professionalism and commitment to providing exceptional service.

However, as with any outing, the Carnarvon Astro Experience is not without risks. All tourists will be required to acknowledge the 'Health and Safety Briefing' and to complete an 'Indemnity Form', attached as Annexures B and C. It remains the responsibility of the Astro-Guides to reiterate the safety requirements based on the site selected for the outing. The following health and safety requirements are the responsibility of the Astro-Guides:

- The site is accessible by vehicle and/or by foot.
- The site is clear of any hazard that may cause injury with insufficient lighting or is cordoned off accordingly.
- The weather is conducive for tours. No rain or wet weather.
- The gate of the Nature Reserve is locked after entry and exit.

The Astro-Guides need to confirm the following with the tourists before the event commences at the point of meeting:

- The guides must caution the tourists to follow the instructions of the guides.
- The guides must caution the tourists to remain with the group.
- The guides must identify a secondary responsible person in the tourist group to take responsibility for a medical emergency, should one involve the responsible person.
- The guides must ensure that tourists are dressed appropriately for the terrain and weather conditions.

8. IMPLEMENTATION GUIDE

An implementation guide is important for events as it provides a clear and structured process, promotes consistency and quality assurance, improves operational efficiency, addresses risk management and safety, supports continuous improvement, and fosters collaboration and teamwork. It serves as a valuable resource to guide Astro-Guides in delivering successful, safe, and exceptional experiences. The following provides a basic guide for implementation:

7.1. Prior to the event

- The guides on rotation are informed and briefed on the confirmed booking.
- The allocated guides must determine the sky-viewing points of interest for the evening.
- The allocated guides must place orders (if any).
- The responsible guides must confirm the time and meeting place with tourists.
- The responsible guides must sign out and collect the Nature Reserve gate key from NRF-SARAO Info Centre.
- The responsible guides must sign out and collect the telescopes and accessories from the NRF-SARAO Info Centre
- The responsible guides must complete the checkout checklist as per Annexure D.

- The responsible guides must set up the telescopes at least 30 minutes before the arrival of the tourists. Additional time must be allocated for larger events that are customised.
- For customised events that include other stakeholders, such as dancers, the responsible guides must facilitate a conduct and safety briefing before the event.
- The responsible guides must complete the event checklist as per Annexure E.

7.2. At the event

- The responsible guides must meet the tourists at the pre-selected contact point.
- The responsible guide must facilitate introductions, note relevant associations and the purpose of the group.
- The allocated guide must reiterate identified safety measures.
- The allocated guide must communicate the code of conduct regarding the use of mobile phones and the opportunity for photos after the event.
- For extended distances, one allocated guide must lead the tourists to the site for viewing with a flashlight, whilst at least one of more guides follow behind the group with a flashlight.
 - *Suggested topic of engagement: heritage and/or significance of the area and/or relevance to astronomy*
- The allocated Astro-Guide must commence the immersive experience at the viewing site.
 - *Suggested method: a five-minute guided sensory and/or meditative session*
- The allocated guide must commence the sky-viewing experience with tourist engagement on astronomy facts and indigenous stories.
- The allocated guide must commence sky viewing through telescopes.
- The allocated guides should answer questions based on their knowledge and/or experience and be supported by other attending guides where unsure.

7.3. After the event

- The allocated guides must communicate the end of the event and photo opportunities at this point.
- The allocated guides must thank the tourists and sensitise them to gratuity opportunities.
- The allocated guides should request the completion of the evaluation form, as per Annexure F.
- The allocated guides should communicate additional rating opportunities.
- For extended distances, the allocated guides must lead tourists back to their vehicles using flashlights in the same manner as upon arrival.
- The responsible guides must clean the area before departure (if required).
- The responsible guides must lock the gate upon leaving the area.
- The allocated guide to return the key and equipment to the NRF-SARAO Info Centre within 24 hours (weekdays) or on the first working day after a weekend.
- The responsible guide must complete the check-in checklist as per Annexure D and have it duly signed by an NRF-SARAO representative as confirmation.

9. CONCLUSION

The Carnarvon Astro Experience Implementation Guide is the first concept document and, therefore, a working document that makes provision for changes when required.



ANNEXURE A: BOOKING FORM

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CARNARVON ASTRO EXPERIENCE BOOKING FORM

Dear Prospective Guest

Please complete the booking form so that we can start preparations for your Carnarvon Astro Experience! If you have any questions, please contact [xxx xxx xxx] so that we can 'guide' you through the process.

CONTACT INFORMATION			
Full Name and Surname:			
Preferred Contact Number:		Alternative:	
Preferred Contact E-mail:			
BOOKING DETAILS			
Date of Sky-viewing:		Preferred Timeslot:	
Number of Adults:		Number of Minors:	
Group/Organisation Name: (If applicable)			
MAIN SERVICE SELECTION			
!Xam Sky viewing	Sky-viewing with telescope Dark-sky tour Indigenous story-telling	1-5 people	
Boesman Loop	Dark-sky tour Indigenous story-telling Hand and foot massage with traditional !Xam medicinal herbs	1-5 people	
Hare	Sky-viewing with telescope Indigenous story-telling Family fun Snacks and sweets	4-8 people (families)	
Canopus	Sky-viewing with telescope Indigenous story-telling Traditional cuisine (light meal)	5-8 people	
Waterslang	Sky-viewing with telescope Dark-sky tour Indigenous story-telling	6-20 people	

Khoi Experience	Dark-sky tour Riel or traditional dance A traditional donkey car ride	10-20 people	
SPECIAL REQUESTS / ADDITIONS			
Hot Chocolate and Marshmallows		Per person	
Sherry		Per person	
Red Wine		Per person	
Ginger Beer		Per person	
Traditional Cuisine (Light Meal)		Per person	
Traditional Dance		Price on Request	
Special Events (Engagements / Gender Reveals)		Price on Request	

PAYMENTS		
Electronic Transfers		
Credit Card		

SPECIAL NOTE

Our guides are part of a community development programme and have limited income streams.
Please consider extending a donation or gratuity as a show of appreciation to our guides.

Terms and Conditions

By submitting this booking request, you acknowledge and agree to the following terms and conditions:
The sky viewing experience is subject to weather conditions and visibility. In case of poor weather or unforeseen circumstances, the event may be rescheduled or cancelled.
Participants are responsible for their own transportation to and from the sky viewing location.
All participants must follow the instructions provided by the astronomy guide and adhere to safety guidelines.
Payment for the sky viewing experience will be required upon confirmation of the booking.
Cancellations or changes to the booking must be made within the specified time frame as communicated by our team.

ANNEXURE B: HEALTH AND SAFETY BRIEFING

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CARNARVON ASTRO EXPERIENCE HEALTH AND SAFETY BRIEFING

Dear Guest

Welcome to our Astro-tourism experience! We are excited to have you join us on this extraordinary journey to explore the wonders of the night sky. Before we begin, we would like to provide you with some important health and safety information to ensure your well-being and enjoyment throughout the tour. Please take a moment to review the following guidelines:

- **Dress Appropriately:** Please dress in layers to adapt to changing weather conditions. Nights can be chilly, so it is advisable to bring warm clothing, including jackets, hats, gloves, and comfortable shoes. It is also recommended to bring insect repellent for warmer evenings. You are requested to leave any valuable items locked in your vehicle.
- **Stay Hydrated:** It is crucial to stay hydrated, even during night-time activities. Please bring a water bottle and drink plenty of fluids throughout the tour to prevent dehydration.
- **Follow Guide Instructions:** Our experienced guides are here to ensure your safety and provide valuable insights. Please pay attention to their instructions and adhere to any safety guidelines they provide. This may include staying with the group, following designated paths, or avoiding certain areas for safety reasons.
- **Be Mindful of Your Surroundings:** As we explore outdoor locations, it is important to be mindful of your surroundings. Watch your step, especially in dimly lit areas, and be aware of any potential hazards, such as uneven terrain or obstacles. If you have any concerns, please inform your guide immediately.
- **Respect the Environment:** We are guests in the natural environment, so let us treat it with respect. Please refrain from littering and follow the principles of Leave-No-Trace. Avoid touching or disturbing plants, wildlife, or geological formations, as they are integral to the ecosystem.
- **Be Careful with Equipment:** The telescopes are sensitive and require constant adjustment by trained guides. Please refrain from touching the telescopes as a slight movement will require readjustment. If you are unable to see the object that is referenced, inform the guide so that the appropriate adjustments can be made.
- **Use Lights Responsibly:** Although it is not preferable, if you need to use a flashlight for an extended walk, ensure it is a red-filtered flashlight or one with adjustable brightness. Bright lights can hinder night vision and disrupt the experience for others. Please be considerate and avoid

shining lights directly into the eyes of fellow participants. You will be requested to switch off any lights at a point.

- **Listen to Your Body:** Pay attention to your physical and mental well-being throughout the tour. If you feel unwell or fatigued, please notify your guide immediately. It is important to communicate any health concerns or conditions that might affect your participation in the activities.
- **Weather Considerations:** Weather conditions can influence the visibility of celestial objects and affect tour logistics. In the event of unfavourable weather, such as heavy rain, thunderstorms, or high winds, adjustments to the itinerary may be necessary for safety reasons. Your guide will keep you informed of any changes or alternative arrangements.
- **Emergency Procedures:** In case of an emergency, please follow the instructions of your guide. They are trained to handle emergencies and will provide guidance on evacuation procedures or necessary actions to ensure your safety. However, the guides are not trained to administer first aid but will provide guidance to the closest facility.

Remember, Astro-tourism is a unique experience that requires cooperation, awareness, and a shared commitment to safety. By adhering to these health and safety guidelines, we can create a memorable and secure journey under the stars. We hope you enjoy your Astro-tourism adventure and make incredible discoveries in the night sky!



ANNEXURE C: INDEMNITY FORM

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CARNARVON ASTRO EXPERIENCE INDEMNITY FORM

I, the undersigned participant, hereby acknowledge and understand the risks associated with Astro-tourism activities and voluntarily choose to participate in the Astro-tourism experience organised by the Carnarvon Astro Guides. In consideration of being allowed to participate in this activity, I agree to the following:

Assumption of Risk: I acknowledge that participating in Astro-tourism activities involves certain inherent risks. These risks include, but are not limited to, unpredictable weather conditions, uneven terrain, potential encounters with wildlife, and the possibility of accidents, injuries, or illness. I understand that these risks cannot be completely eliminated, and I voluntarily assume all risks associated with participating in the Astro-tourism experience.

Medical Fitness: I hereby declare that I am physically and mentally fit to participate in the Astro-tourism activities. I understand the physical requirements of the tour and affirm that I do not have any medical conditions or disabilities that would prevent me from safely participating. I will inform the tour operator of any changes in my medical condition that may affect my ability to participate.

Compliance with Safety Instructions: I agree to comply with all safety instructions, guidelines, and rules provided by the Carnarvon Astro Guides. I understand that failure to follow these instructions may result in injury to others or myself and may lead to my removal from the tour without any right to a refund.

Release and Waiver of Liability: I hereby release, discharge, and hold harmless any Carnarvon Astro Guides and affiliates from any and all liability, claims, actions, damages, costs, or expenses arising from my participation in the Astro-tourism experience. This release applies to any injury, illness, loss, or damage, whether caused by the negligence of the guides or any other party, or otherwise.

Personal Belongings: I understand that I am responsible for the safety and security of my personal belongings during the Astro-tourism experience. The guides shall not be held liable for any loss, theft, or damage to my personal belongings.

I have carefully read and understand the content of the indemnity form, and I voluntarily agree to be bound by its terms.

ANNEXURE D: EQUIPMENT CHECKLIST

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ASTRO-TOURISM EQUIPMENT CHECK LIST

Astro-Guide

The telescopes and related equipment remains the property of NRF-SARAO. Please complete the checklist with the check-out and check-in of the all equipment. Make sure that you leave the form at the NRF-SARAO Info Centre. By signing the document, you confirm that the equipment is complete and in working order. The equipment remains the responsibility of the Astro-Guide that sign this form. In the event that something has been broken or lost, the responsible Astro-Guide must inform the relevant NRF-SARAO representative.

Equipment Details	Check-Out	Check-In
Telescope Basics, Optics and Accessories		
Verify that the telescope is the correct model and size for the event.		
Inspect the telescope for any physical damage or missing parts.		
Ensure the tripod or mount is stable and secure.		
Check that all screws and knobs are tightened appropriately		
Clean the telescope's optics, including the lenses, mirrors, and eyepieces, using appropriate cleaning tools and techniques.		
Inspect the optics for any scratches, dust, or debris.		
Confirm that all necessary eyepieces and filters are available and in good condition.		
Check the condition of any additional accessories, such as a finder-scope		
Check that all covers are present and affixed appropriately		
Keys		
Check that both keys for the Nature Reserve is present and in working condition		

Electronic Device		
Inspect the Electronic Device for any physical damage or missing parts.		
Check that the Electronic Device is in working order		
Check that the Electronic Device is fully charged		

CHECK-OUT: By signing this form, I confirm that the listed equipment is in working order at check-out date:

Astro-Guide Name and Surname	Signature	Check-Out Date

CHECK-IN: By signing this form, I confirm that the listed equipment is in working order at check-in date:

Astro-Guide Name and Surname	Signature	Check-In Date



ANNEXURE E: EVENT CHECKLIST

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CARNARVON
ASTRO GUIDES
TO DARK SKIES AND BEYOND

ASTRO TOURISM EVENT CHECKLIST



ANNEXURE F: EVALUATION FORM

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ASTRO TOURISM EVENT EVALUATION FORM

Dear Guest

Thank you for participating in our Astro-Tourism event! We value your feedback as it helps us improve our services and create better experiences for our guests. Please take a few moments to complete this evaluation form. Your responses will remain confidential.

Description of Offering	Rating		
Organisation and Logistics			
Ease of registration and booking process:			
Clarity of event instructions and information:			
Timeliness and efficiency of the event schedule:			
Quality of communication prior to the event:			
Guides/Presenters			
Knowledge and expertise of the guide:			
Ability to engage and communicate effectively:			
Responsiveness to participant questions:			
Overall professionalism and attitude:			
Content and Activities			
Relevance and interest of the content presented:			
Variety and diversity of activities:			
Engagement level and interactivity of the activities:			

Overall Experience			
Overall satisfaction with the Astro-Tourism event:			
Likelihood to recommend the event to others:			
Value for money in relation to the experience offered:			
Any additional comments or suggestions for improvement:			

Thank you for your time and valuable feedback. Your input is greatly appreciated. If you have any further comments or would like to share more details about your experience, please feel free to contact us at [contact information]. We hope to welcome you again in the future!

