

Acknowledgements

This booklet would not be possible without the generous help, guidance, and patience of many volunteers, scientists, and river guides that assisted me in the collection of this information.

A special thanks to Larry Stevens for his advice and instruction in the use of the Solar Pathfinder™; to Chris Franke for helping me collect data on more than two dozen new campsites during a High Desert Adventures trip, and introducing me to many of his fellow guides; and to Kenny Baker for providing needed missing data, proof-reading, and shared inspiration on creating a "Book of Shade."

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The Boatman's Almanac

A compilation of monthly sunrise & sunset times for campsites & cool places in Grand Canyon



By Jeff Sorensen
March 1999 Edition

Preface

The information in this booklet was recorded from an instrument called the Solar Pathfinder™. Architects & engineers use this modern-day “sundial” to measure the amount of annual solar energy that affects a specific location.

Using the Solar Pathfinder™ we can predict the average monthly sunrise & sunset times **within a half hour accuracy (+/-)** for each location recorded. Discrepancies in actual sunrise & sunset times may result from changes in seasonal tree canopy, topographical features of canyon walls, time of the month, & the exact location where initial readings were taken. In most cases, Pathfinder readings were taken in the **center of the beach or camp “kitchen”** where most people would congregate.

It's my intent to provide a useful guide for Grand Canyon river runners in choosing campsites that offer early summer shade or early winter sunlight. Backpackers & photographers may also find this information useful for optimizing available daylight.

This is a free publication—my gift to the river guide community as a way of saying thanks.

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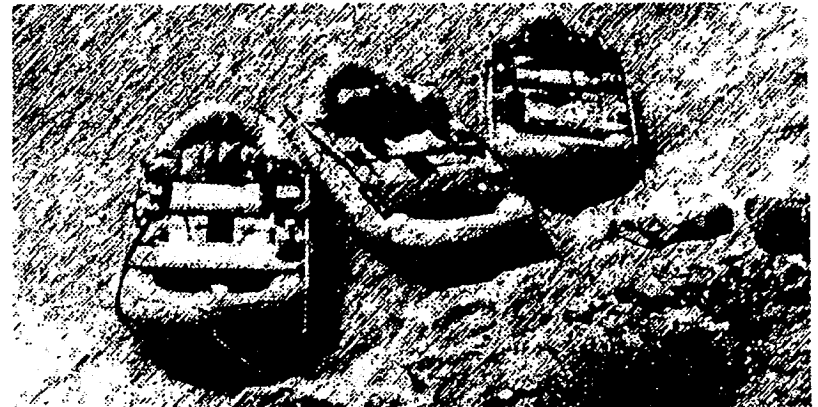
This booklet is dedicated to the men & women working in Grand Canyon as boatmen of the Colorado River. Your knowledge, spirit, & love of the Canyon inspires others that visit this remarkable place. Thank you!

220 MI RR CAMP (upper camp, kitchen)

Month	Sunrise	Sunset
JAN	08:30	15:00
FEB	08:30	16:00
MAR	07:30	16:00
APR	07:30	16:00
MAY	07:30	16:30
JUN	07:30	16:30
JUL	07:30	16:30
AUG	07:30	16:00
SEP	07:30	15:30
OCT	08:00	16:00
NOV	08:30	15:30
DEC	08:30	15:00

224.5 MI RL CAMP (lower camp, kitchen)

Month	Sunrise	Sunset
JAN	11:30	16:00
FEB	10:00	16:00
MAR	09:30	16:30
APR	08:30	16:30
MAY	08:00	17:00
JUN	08:00	17:00
JUL	08:00	17:00
AUG	08:30	17:00
SEP	09:00	16:30
OCT	10:00	16:00
NOV	11:30	16:00
DEC	12:00	16:00



About the Author

Jeff Sorensen is a wildlife biologist with the Arizona Game & Fish Department. Over the last three years, Jeff participated in studies of the Kanab ambersnail at Vaseys Paradise. He has also surveyed numerous springs & seeps along the river corridor & remote backcountry of Grand Canyon.

PARASHANT CAMP
(198.5 mi RR, main camp)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	(no direct light)	
FEB	09:00	14:00
MAR	08:30	14:00
APR	08:30	14:00
MAY	08:00	14:30
JUN	08:00	14:30
JUL	07:30	14:30
AUG	08:30	14:30
SEP	08:30	14:30
OCT	08:30	14:00
NOV	09:00	14:00
DEC	09:00	14:00

202 MI RR CAMP
(main camp)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	09:30	15:30
FEB	09:30	15:30
MAR	09:30	15:30
APR	08:30	16:00
MAY	08:00	16:00
JUN	07:30	16:00
JUL	08:00	16:00
AUG	08:30	16:00
SEP	09:30	16:00
OCT	09:30	15:30
NOV	09:30	15:30
DEC	10:00	15:30

LEE'S FERRY RAMP
(upper parking lot)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	08:00	16:30
FEB	07:30	16:30
MAR	07:30	17:00
APR	07:00	17:30
MAY	06:30	18:00
JUN	06:30	18:00
JUL	06:30	18:00
AUG	06:30	17:30
SEP	07:00	17:00
OCT	07:30	17:00
NOV	08:00	16:30
DEC	08:00	16:30

18 MI RR CAMP
(main camp)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	12:00	16:00
FEB	11:00	15:30
MAR	09:30	15:30
APR	09:00	15:30
MAY	09:00	15:30
JUN	09:00	15:30
JUL	09:00	15:30
AUG	09:30	15:30
SEP	09:30	15:30
OCT	09:30	15:30
NOV	11:30	16:00
DEC	12:00	16:00

GRANITE PARK CAMP
(208.8 mi RL, beach)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	10:00	15:00*
FEB	09:00	15:30*
MAR	09:00	16:30*
APR	09:00	17:30
MAY	08:00	17:30
JUN	08:00	17:30
JUL	08:00	17:30
AUG	09:00	17:30
SEP	09:00	17:00*
OCT	09:00	15:30*
NOV	10:00	15:00*
DEC	10:00	15:30*

(*1-2 hrs shade from trees)

THREE SPRINGS
(215.6 mi RL, drainage)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	09:30	14:30
FEB	08:30	16:00
MAR	07:30	16:00
APR	07:00	16:00
MAY	07:00	16:30
JUN	07:00	16:30
JUL	07:00	16:30
AUG	07:00	16:30
SEP	07:00	16:00
OCT	08:00	16:00
NOV	09:30	14:30
DEC	10:30	14:00

20 MI RL CAMP
(main camp)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	10:30	14:30
FEB	10:00	14:30
MAR	09:30	14:30
APR	09:30	15:00
MAY	09:00	15:00
JUN	09:00	15:00
JUL	09:00	15:00
AUG	09:30	15:00
SEP	09:30	14:30
OCT	10:00	14:30
NOV	10:00	14:30
DEC	11:00	14:30

NORTH CANYON
(20.5 mi RR, upper camp)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	10:30	13:30
FEB	10:00	14:00
MAR	09:30	15:30
APR	09:30	16:00
MAY	09:00	16:00
JUN	08:30	16:00
JUL	08:30	16:00
AUG	09:00	16:00
SEP	09:30	15:30
OCT	10:00	14:00
NOV	10:30	14:00
DEC	10:30	13:30

24.5 MI RL CAMP
(upper camp)

Month	Sunrise	Sunset
JAN	11:30	16:00
FEB	10:30	16:30
MAR	10:00	16:30
APR	09:00	16:30
MAY	08:00	16:00
JUN	08:00	16:00
JUL	08:00	16:00
AUG	09:00	16:00
SEP	09:30	16:30
OCT	10:30	16:30
NOV	11:00	16:00
DEC	12:00	16:00*

(*0.5 hr break 1500-1530)

26.3 MI RL CAMP
(camp above Tiger Wash)

Month	Sunrise	Sunset
JAN	13:30	15:00
FEB	12:30	15:30
MAR	12:30	15:30
APR	11:30	16:00
MAY	11:00	16:00
JUN	10:30	16:00
JUL	10:30	16:00
AUG	11:30	16:00
SEP	12:00	15:30
OCT	12:30	15:30
NOV	13:00	15:00
DEC	13:30	15:00

186 MI RL CAMP
(lower camp)

Month	Sunrise	Sunset
JAN	11:30	12:30
FEB	11:00	16:00
MAR	10:30	16:00
APR	08:00	17:00
MAY	07:30	16:30
JUN	07:30	16:00
JUL	08:00	16:00
AUG	08:00	16:30
SEP	10:00	16:30
OCT	10:30	16:00
NOV	11:00	12:30
DEC	12:00	12:30

WHITMORE HELIPAD
(187.1 mi RL, beach)

Month	Sunrise	Sunset
JAN	(no direct light)	
FEB	15:00	16:00
MAR	13:00	17:00
APR	12:00	17:00
MAY	11:00	16:30
JUN	11:00	16:30
JUL	11:00	16:30
AUG	11:30	17:00
SEP	12:30	17:00
OCT	14:30	16:30
NOV	(no direct light)	
DEC	(no direct light)	

SILVER GROTTTO CAMP
(29.3 mi RL, main camp)

Month	Sunrise	Sunset
JAN	15:30	16:00
FEB	14:30	16:00
MAR	13:30	16:30
APR	12:00	16:30
MAY	11:30	17:00
JUN	11:30	17:00
JUL	11:30	17:00
AUG	12:00	16:30
SEP	13:00	16:30
OCT	14:00	16:00
NOV	13:30	16:00
DEC	13:30	16:00

FENCE FAULT CAMP
(30.4 mi RR, main camp)

Month	Sunrise	Sunset
JAN	10:30	14:30
FEB	10:00	14:30
MAR	09:00	15:00
APR	08:30	15:30
MAY	08:00	15:30
JUN	07:30	16:00
JUL	08:00	15:30
AUG	08:00	15:30
SEP	09:00	15:00
OCT	09:30	14:30
NOV	10:30	14:00
DEC	10:30	14:30

LOWER WHITMORE
(188.2 mi RR, lower camp)

Month	Sunrise	Sunset
JAN	10:00	14:00
FEB	10:00	15:30
MAR	09:30	16:00
APR	08:30	17:00
MAY	08:00	16:30
JUN	07:30	17:00
JUL	08:00	16:30
AUG	08:30	17:00
SEP	09:00	16:00
OCT	09:30	15:30
NOV	10:30	14:00
DEC	10:30	14:00

HUALAPAI ACRES
(194.1 mi RL, upper camp)

Month	Sunrise	Sunset
JAN	11:30	12:00
FEB	11:00	14:00
MAR	08:00	16:00
APR	07:30	16:00
MAY	07:30	18:00
JUN	07:30	18:00
JUL	07:30	18:00
AUG	07:30	16:30
SEP	08:00	16:00
OCT	10:30	14:00
NOV	11:00	13:00
DEC	(no direct light)	

COVE CANYON CAMP
(174.3 mi RR, upper camp)

Month	Sunrise	Sunset
JAN	15:30	16:00
FEB	12:00	16:30*
MAR	07:30	16:30**
APR	07:30	16:30
MAY	07:30	16:00
JUN	07:30	17:00
JUL	07:30	17:00
AUG	07:30	17:00
SEP	07:30	17:00
OCT	07:00	17:00***
NOV	15:00	16:00
DEC	15:30	16:00

(*1 hr break 1230-1330)
(**1 hr break 1000-1100)
(*** 3.5 hr break 0800-1130)

BELOW RED SLIDE
(175.9 mi RL, main camp)

Month	Sunrise	Sunset
JAN	13:00	15:30
FEB	12:30	15:30
MAR	11:30	15:30
APR	09:30	15:30
MAY	09:00	15:00
JUN	07:30	15:00
JUL	08:30	15:00
AUG	09:00	15:30
SEP	10:00	15:30
OCT	12:00	15:30
NOV	13:00	15:30
DEC	13:00	15:30

SOUTH CANYON
(31.7 mi RR, main camp)

Month	Sunrise	Sunset
JAN	11:30	15:30
FEB	11:00	15:00
MAR	10:30	15:30
APR	09:30	16:00
MAY	09:00	16:00
JUN	08:30	16:00
JUL	09:00	16:00
AUG	09:00	16:00
SEP	10:00	15:30
OCT	11:00	15:00
NOV	11:00	15:00
DEC	11:30	14:30

VASEYS PARADISE
(31.8 mi RR, base of springs)

Month	Sunrise	Sunset
JAN	(no direct light)	
FEB	(no direct light)	
MAR	07:30	11:30
APR	07:00	13:30
MAY	07:30	13:30
JUN	07:30	14:00
JUL	07:30	13:30
AUG	07:00	13:30
SEP	07:30	11:30
OCT	08:30	09:30
NOV	(no direct light)	
DEC	(no direct light)	

HONGA SPRING
(177.0 mi RL, main camp)

Month	Sunrise	Sunset
JAN	12:30	14:00
FEB	11:30	15:00
MAR	09:00	15:00
APR	09:30	16:00
MAY	09:00	15:30
JUN	09:00	15:30
JUL	09:00	15:30
AUG	09:30	16:00
SEP	10:00	15:00
OCT	10:00	15:00
NOV	12:00	14:00
DEC	12:30	13:30

TEQUILA BEACH
(179.8 mi RR, main camp)

Month	Sunrise	Sunset
JAN	(no direct light)	
FEB	11:00	16:30*
MAR	10:00	16:30
APR	07:30	16:00
MAY	07:00	16:30
JUN	06:00	16:30
JUL	06:00	16:30
AUG	07:30	16:00
SEP	08:30	16:30
OCT	11:00	16:30**
NOV	16:00	16:30
DEC	(no direct light)	

(*1.5 hr break 1300-1430)
(**0.5 hr break 1300-1330)

LITTLE REDWALL
(33.8 mi RL, main camp)

Month	Sunrise	Sunset
JAN	13:00	14:00
FEB	13:00	14:30
MAR	13:00	15:00
APR	13:00	15:30
MAY	13:00	15:30
JUN	13:00	16:00
JUL	13:00	15:30
AUG	13:30	15:30
SEP	13:00	15:00
OCT	13:00	14:30
NOV	13:00	14:00
DEC	13:00	14:00

NAUTILOID CANYON
(34.8 mi RL, main camp)

Month	Sunrise	Sunset
JAN	10:00	13:30
FEB	11:00	14:00
MAR	10:30	14:30
APR	10:00	14:30
MAY	10:30	15:00
JUN	10:30	15:00
JUL	10:30	15:00
AUG	10:00	14:30
SEP	10:30	14:30
OCT	10:00	14:30
NOV	10:00	13:30
DEC	10:00	13:30

MARTHA'S KITCHEN
(38.3 mi RL, upper camp)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	(no direct light)	
FEB	(no direct light)	
MAR	(no direct light)	
APR	14:00	16:00
MAY	12:30	15:30
JUN	12:00	15:30
JUL	12:30	15:30
AUG	13:00	16:00
SEP	(no direct light)	
OCT	(no direct light)	
NOV	(no direct light)	
DEC	(no direct light)	

BUCK FARM CAMP
(40.9 mi RR, upper camp)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	12:30	15:00
FEB	12:00	15:30
MAR	10:30	15:30
APR	10:00	14:30
MAY	09:00	15:00
JUN	07:30	16:30
JUL	08:00	16:30
AUG	09:30	14:30
SEP	10:30	15:00
OCT	12:30	15:30
NOV	12:30	15:30
DEC	13:00	15:00

LOWER NATIONAL
(166.6 mi RL, main camp)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	(no direct light)	
FEB	14:00	14:30
MAR	12:30	16:00
APR	11:30	16:30
MAY	10:00	16:00
JUN	10:00	16:00
JUL	10:00	16:00
AUG	11:00	16:30
SEP	12:00	16:30
OCT	14:00	15:00
NOV	(no direct light)	
DEC	(no direct light)	

FERN GLEN CAMP
(168.0 mi RR, lower camp)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	14:00	15:00
FEB	07:30	15:00*
MAR	07:30	15:30
APR	07:30	15:30
MAY	07:30	16:30
JUN	07:30	16:00
JUL	07:30	16:00
AUG	07:30	15:30
SEP	07:30	15:30
OCT	07:30	15:30
NOV	14:00	15:00
DEC	14:00	15:00

(*4 hr break 0930-1330)

BERT'S CANYON
(41.4 mi RR, side canyon)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	(no direct light)	
FEB	(no direct light)	
MAR	(no direct light)	
APR	08:00	14:30*
MAY	07:30	14:30
JUN	07:30	14:30
JUL	07:30	14:30
AUG	07:30	14:30
SEP	08:00	09:00**
OCT	(no direct light)	
NOV	(no direct light)	
DEC	(no direct light)	

(*3 hr break 1000-1300)
(**2.5 hr break 1000-1230)

44 MI RL CAMP
(main camp)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	(no direct light)	
FEB	12:30	15:30
MAR	11:00	17:00
APR	10:30	16:30
MAY	10:00	16:00
JUN	09:30	16:00
JUL	09:30	16:00
AUG	10:30	16:30
SEP	10:30	17:00
OCT	12:00	16:30
NOV	(no direct light)	
DEC	(no direct light)	

FERN GLEN SEEP
(first large hanging garden)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	(no direct light)	
FEB	(no direct light)	
MAR	09:30	10:00
APR	09:30	14:00
MAY	10:00	14:30
JUN	10:00	14:00
JUL	10:00	14:30
AUG	10:00	14:00
SEP	09:30	13:00
OCT	(no direct light)	
NOV	(no direct light)	
DEC	(no direct light)	

MOHAWK CANYON
(171.6 mi RL, beach)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	10:30	12:30
FEB	10:00	12:30
MAR	09:30	16:30
APR	08:30	17:00
MAY	06:00	16:30
JUN	06:00	16:30
JUL	06:00	16:30
AUG	08:00	17:00
SEP	09:30	17:00
OCT	09:30	12:30
NOV	10:00	12:30
DEC	10:30	11:30

MATKAT HOTEL
(148.4 mi RL, upper camp)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	(no direct light)	
FEB	(no direct light)	
MAR	(no direct light)	
APR	08:30	09:30
MAY	06:30	12:30*
JUN	06:30	13:00**
JUL	06:30	12:30*
AUG	08:00	09:30
SEP	(no direct light)	
OCT	(no direct light)	
NOV	(no direct light)	
DEC	(no direct light)	

(*2.5 hr break 0930-1200)
(**1.5 hr break 1000-1130)

UPSET HOTEL
(150.4 mi RL, the "Hilton")

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	(no direct light)	
FEB	16:00	16:30
MAR	15:00	16:30
APR	14:00	16:00
MAY	13:30	16:00
JUN	13:00	16:00
JUL	13:30	16:00
AUG	14:00	16:00
SEP	14:30	16:30
OCT	15:30	16:30
NOV	(no direct light)	
DEC	(no direct light)	

UPPER SADDLE CAMP
(47.0 mi RR, upper kitchen)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	09:00	12:30
FEB	09:00	13:00
MAR	09:00	14:00
APR	09:00	15:00*
MAY	09:00	16:00*
JUN	09:00	16:00*
JUL	09:00	16:00*
AUG	09:00	16:00*
SEP	09:00	15:00*
OCT	09:00	13:30
NOV	09:00	12:30
DEC	09:00	12:30

(*1-2 hrs shade from trees)

LOWER SADDLE CAMP
(47.0 mi RR, beach)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	08:30	12:30
FEB	09:00	13:00
MAR	09:00	13:30
APR	09:00	14:00
MAY	08:00	14:30
JUN	08:00	15:00
JUL	08:00	15:00
AUG	08:30	14:30
SEP	09:00	13:30
OCT	09:00	13:00
NOV	08:30	12:30
DEC	08:30	12:30

LEDGES CAMP
(151.5 mi RR, main camp)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	12:00	14:30
FEB	11:30	14:30
MAR	11:00	15:30
APR	11:00	15:30
MAY	10:00	15:00
JUN	10:00	15:00
JUL	09:30	15:00
AUG	10:30	15:00
SEP	11:00	15:30
OCT	11:30	14:30
NOV	12:00	14:30
DEC	12:30	14:00

LAST CHANCE CAMP
(155.7 mi RR, main camp)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	11:00	14:00
FEB	10:30	14:00
MAR	10:30	14:30
APR	10:00	14:30
MAY	09:30	14:30
JUN	09:30	14:30
JUL	09:30	14:30
AUG	10:00	14:30
SEP	10:30	14:00
OCT	10:30	14:30
NOV	11:00	14:00
DEC	11:30	14:00

SADDLE CANYON
(side canyon, near narrows)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	(no direct light)	
FEB	(no direct light)	
MAR	13:30	14:30
APR	12:30	14:30
MAY	12:00	14:00
JUN	11:30	14:00
JUL	12:00	14:00
AUG	12:30	14:30
SEP	13:00	14:30
OCT	13:30	14:30
NOV	(no direct light)	
DEC	(no direct light)	

DINOSAUR CAMP
(50.0 mi RR, main camp)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	09:30	12:30
FEB	09:30	15:30*
MAR	09:00	15:30
APR	08:30	16:00
MAY	08:30	16:00
JUN	08:30	16:00
JUL	08:30	16:00
AUG	08:30	16:00
SEP	09:00	15:30
OCT	09:00	15:30**
NOV	09:30	12:30
DEC	10:00	12:00

(*1 hr break 1300-1400)
(**0.5 hr break 1300-1330)

51.2 MI RL CAMP
(main camp)

Month	Sunrise	Sunset
JAN	10:30	14:30
FEB	10:00	14:30
MAR	09:30	15:00
APR	09:30	15:30
MAY	08:30	15:30
JUN	08:00	15:30
JUL	08:30	15:30
AUG	09:00	15:30
SEP	09:30	15:00
OCT	10:00	14:30
NOV	10:30	15:00
DEC	11:00	14:30

LITTLE NANKOWEAP
(51.8 mi RR, main camp)

Month	Sunrise	Sunset
JAN	09:30	14:00
FEB	09:00	15:30
MAR	08:30	15:30
APR	08:30	15:00
MAY	08:30	15:00
JUN	08:30	15:00
JUL	08:30	15:00
AUG	08:30	15:00
SEP	08:30	15:30
OCT	08:30	15:30
NOV	09:30	14:00
DEC	09:30	13:30

DORIS CAMP
(137.9 mi RL, main camp)

Month	Sunrise	Sunset
JAN	(no direct light)	
FEB	(no direct light)	
MAR	07:00	09:00
APR	07:00	10:00
MAY	06:30	11:30
JUN	06:30	11:30
JUL	06:30	11:30
AUG	07:00	10:30
SEP	07:00	09:30
OCT	(no direct light)	
NOV	(no direct light)	
DEC	(no direct light)	

KANAB CREEK MOUTH
(143.5 mi RR, main camp)

Month	Sunrise	Sunset
JAN	(no direct light)	
FEB	10:00	16:30*
MAR	07:30	16:30
APR	07:00	16:30
MAY	07:30	16:30
JUN	07:30	16:00
JUL	07:30	16:30
AUG	07:30	16:30
SEP	07:30	16:30
OCT	10:00	16:30*
NOV	(no direct light)	
DEC	(no direct light)	

(*5 hr break 1030-1530)

MIDDLE NANKOWEAP
(53.0 mi RR, main camp)

Month	Sunrise	Sunset
JAN	08:30	14:00
FEB	08:30	14:30
MAR	08:30	15:00
APR	08:30	15:00
MAY	08:30	15:00
JUN	08:30	15:00
JUL	08:30	15:00
AUG	08:30	15:00
SEP	08:30	15:00
OCT	08:30	14:30
NOV	08:30	14:00
DEC	08:30	12:00

LOWER NANKOWEAP
(53.1 mi RR, kitchen)

Month	Sunrise	Sunset
JAN	08:30	11:30
FEB	08:00	14:00
MAR	08:00	14:30
APR	08:00	15:00
MAY	08:00	15:00
JUN	08:00	15:00
JUL	08:00	15:00
AUG	08:00	15:00
SEP	08:00	14:30
OCT	08:00	14:30
NOV	08:00	12:00*
DEC	08:30	11:30

(*1.5 hr break 1230-1400)

WHISPERING FALLS
(3 mi up Kanab Creek)

Month	Sunrise	Sunset
JAN	(no direct light)	
FEB	(no direct light)	
MAR	12:30	13:00
APR	11:30	13:00
MAY	11:30	13:00
JUN	11:30	13:00
JUL	11:30	13:00
AUG	11:30	13:30
SEP	12:00	13:00
OCT	(no direct light)	
NOV	(no direct light)	
DEC	(no direct light)	

ABOVE OLO CAMP
(145.2 mi RL, main camp)

Month	Sunrise	Sunset
JAN	11:30	14:00
FEB	11:00	14:00
MAR	11:00	14:00
APR	11:00	14:30
MAY	10:30	14:30
JUN	10:30	14:30
JUL	10:30	14:30
AUG	11:00	14:30
SEP	11:00	14:00
OCT	11:00	14:00
NOV	11:30	14:00
DEC	11:30	14:00

JUNEBUG CAMP
(136.0 mi RL, main camp)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	08:00	13:00*
FEB	07:30	13:30
MAR	07:00	15:00
APR	07:00	15:30
MAY	07:00	17:00
JUN	07:00	17:00
JUL	07:00	17:00
AUG	07:00	17:30
SEP	07:00	15:30
OCT	07:30	14:00
NOV	08:00	13:00
DEC	08:30	12:30**

(*1 hr break 1000-1100)
(**0.5 hr break 1000-1030)

PONCHO'S KITCHEN
(136.8 mi RL, beach)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	(no direct light)	
FEB	(no direct light)	
MAR	(no direct light)	
APR	13:00	15:30*
MAY	11:30	16:00*
JUN	10:30	17:00*
JUL	11:30	17:00*
AUG	12:30	16:00*
SEP	13:30	15:00*
OCT	(no direct light)	
NOV	(no direct light)	
DEC	(no direct light)	

(*western half of the beach gets earlier sunlight)

KWAGUNT CAMP
(56.2 mi RR, main camp)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	10:30	14:00
FEB	10:00	14:30
MAR	09:30	14:30
APR	08:30	15:30
MAY	08:30	17:00
JUN	08:30	17:00
JUL	08:30	17:00
AUG	08:30	17:00
SEP	09:30	15:30
OCT	09:30	15:30
NOV	10:30	14:00
DEC	10:30	14:30

LCR CONFLUENCE
(64.1 mi RL, near the mouth)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	10:30	16:00*
FEB	09:30	16:30
MAR	07:30	16:30
APR	07:00	16:30
MAY	07:00	16:30
JUN	07:00	16:30
JUL	07:00	16:30
AUG	07:00	16:30
SEP	07:00	16:30
OCT	08:00	16:30
NOV	10:30	16:00*
DEC	10:30	15:30*

(*1.5 hr break 1130-1300)

FOOTBALL FIELD
(136.9 mi RL, "50-yd line")

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	09:30	10:30
FEB	07:30	11:30
MAR	07:00	13:00
APR	06:30	14:00
MAY	06:30	15:30
JUN	06:30	15:30
JUL	06:30	15:30
AUG	06:30	14:30
SEP	07:00	13:30
OCT	07:00	12:00
NOV	09:30	10:30
DEC	(at 1000 only)	

BACK EDDY CAMP
(137.0 mi RL, main camp)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	(no direct light)	
FEB	08:00	09:00
MAR	08:00	09:30
APR	08:30	10:00
MAY	08:30	10:30
JUN	08:30	10:30
JUL	08:30	10:30
AUG	08:30	10:00
SEP	08:00	09:30
OCT	08:00	09:00
NOV	(no direct light)	
DEC	(no direct light)	

LAVA CHUAR CAMP
(65.5 mi RR, beach)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	08:30	14:30
FEB	08:30	14:30
MAR	08:00	16:00
APR	07:30	16:00
MAY	07:30	16:00
JUN	07:30	16:00
JUL	07:30	16:00
AUG	07:30	16:00
SEP	08:00	16:00
OCT	08:00	14:30
NOV	08:30	14:30
DEC	09:00	14:30

TANNER CAMP
(68.4 mi RR, main camp)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	09:00	16:30
FEB	08:30	16:30
MAR	08:00	17:00
APR	07:30	17:30
MAY	06:30	18:00
JUN	06:30	18:00
JUL	06:30	18:00
AUG	07:00	17:30
SEP	07:30	17:00
OCT	08:30	16:30
NOV	09:00	16:30
DEC	09:00	16:30

CARDENAS CAMP
(71.0 mi RL, main camp)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	08:30	15:00
FEB	07:30	16:00
MAR	07:00	17:00
APR	06:30	17:30
MAY	06:00	18:00
JUN	06:00	18:00
JUL	06:00	18:00
AUG	06:00	17:30
SEP	07:00	17:00
OCT	07:30	16:30
NOV	08:30	15:00
DEC	08:30	15:00

LOWER RATTLESNAKE
(74.3 mi RR, main camp)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	10:00	15:00
FEB	09:30	15:00
MAR	09:00	15:00
APR	08:30	15:30
MAY	08:00	16:00
JUN	08:00	17:00
JUL	08:00	16:00
AUG	08:30	15:30
SEP	08:30	15:00
OCT	09:30	15:00
NOV	10:00	15:00
DEC	10:30	15:00

RACETRACK CAMP
(133.5 mi RR, near Tapeats)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	08:30	14:30
FEB	08:30	14:30
MAR	08:30	15:00
APR	08:30	17:00
MAY	09:00	17:00
JUN	09:00	17:00
JUL	09:00	17:00
AUG	09:00	17:00
SEP	08:30	16:00
OCT	08:30	14:30
NOV	08:30	14:30
DEC	08:30	14:30

UPPER TAPEATS
(133.8 mi RR, at confluence)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	10:00	14:00
FEB	09:00	14:00
MAR	09:00	16:00
APR	09:00	16:30
MAY	09:00	15:30
JUN	09:00	15:30
JUL	09:00	15:30
AUG	09:00	16:00
SEP	09:00	16:00
OCT	09:00	15:00
NOV	10:00	14:00
DEC	10:30	14:00

UPPER NEVILL'S CAMP
(75.3 mi RL, main camp)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	13:00	15:30
FEB	12:30	16:00
MAR	11:30	16:00*
APR	11:30	16:30**
MAY	13:00	17:00**
JUN	13:00	17:00**
JUL	13:00	17:00**
AUG	13:00	16:30
SEP	11:00	16:00
OCT	12:30	16:00
NOV	13:00	15:30
DEC	13:30	15:30

(*0.5 hr break 1200-1230)
(**2-3 hrs shade from trees)

NEVILL'S RAPID CAMP
(75.6 mi RL, beach)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	10:30	15:30
FEB	09:00	15:00
MAR	09:00	15:00
APR	08:30	15:00
MAY	07:30	15:00
JUN	07:30	15:00
JUL	07:30	15:00
AUG	08:00	15:30
SEP	09:00	15:00
OCT	09:00	15:00
NOV	09:30	15:30
DEC	10:30	15:30

THUNDER RIVER
(overlook near Thunder Spring)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	09:00	15:00
FEB	07:00	15:00
MAR	07:00	15:30
APR	06:30	15:30
MAY	06:30	15:30
JUN	06:30	15:30
JUL	06:30	15:30
AUG	06:30	15:30
SEP	07:00	15:30
OCT	07:00	15:00
NOV	08:30	14:30
DEC	08:00	14:30

DEER SPRING
(Deer Creek, trail near spring)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	12:00	16:00
FEB	11:30	16:30
MAR	11:00	17:00
APR	08:30	17:00
MAY	09:00	17:30
JUN	09:00	17:00
JUL	09:00	17:00
AUG	08:30	17:00
SEP	11:00	17:00
OCT	11:00	16:30
NOV	11:30	16:00
DEC	11:30	16:00

BLACKTAIL CAMP
(120.0 mi RR, upper camp)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	08:30	11:30
FEB	08:00	15:00*
MAR	07:00	16:00
APR	07:30	17:30
MAY	07:30	18:00
JUN	07:30	18:00
JUL	07:30	18:00
AUG	07:30	18:00
SEP	07:00	17:00
OCT	08:00	15:00
NOV	08:00	11:30
DEC	08:30	11:00

125.4 MI RL CAMP
(main camp)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	12:00	15:30
FEB	09:00	16:00*
MAR	08:00	16:00
APR	07:30	16:30
MAY	06:30	16:00
JUN	06:00	16:00
JUL	06:00	16:00
AUG	07:00	16:00
SEP	08:00	16:30
OCT	08:30	16:00
NOV	12:00	15:30
DEC	12:30	15:30

(*0.5 hr break 1000-1030)

122 MI RR CAMP
(main camp)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	09:00	13:00*
FEB	07:30	14:00
MAR	07:00	15:30
APR	06:30	16:30
MAY	07:00	17:00
JUN	07:00	17:00
JUL	07:00	17:00
AUG	06:30	17:00
SEP	06:30	16:30
OCT	07:30	14:30
NOV	09:00	13:30**
DEC	09:00	13:00***

(*2 hr break 1000-1200)
(**1.5 hr break 1000-1130)
(***2.5 hr break 0930-1200)

STONE CREEK CAMP
(132.0 mi RR, main camp)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	09:30	14:30
FEB	08:30	14:30
MAR	08:30	15:00
APR	08:30	17:00
MAY	09:00	17:00
JUN	09:00	17:00
JUL	09:00	17:00
AUG	09:00	17:00
SEP	08:30	16:00
OCT	08:30	14:30
NOV	08:30	14:30
DEC	08:30	14:00

HANCE CAMP
(76.7 mi RL, main camp)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	12:30	14:30
FEB	11:00	15:30*
MAR	08:00	16:00
APR	06:30	17:30
MAY	06:00	18:00
JUN	06:00	18:00
JUL	06:00	18:00
AUG	06:30	17:30
SEP	07:00	17:00
OCT	09:00	15:00
NOV	12:30	14:00
DEC	12:30	13:30

(*0.5 hr break 1130-1200)

UPPER CREMATION
(87.1 mi RL, upper camp)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	(no direct light)	
FEB	(no direct light)	
MAR	(no direct light)	
APR	07:30	15:30*
MAY	07:30	15:30**
JUN	07:30	16:00
JUL	07:30	15:30
AUG	07:30	15:30***
SEP	(no direct light)	
OCT	(no direct light)	
NOV	(no direct light)	
DEC	(no direct light)	

(*5 hr break 0930-1430)
(**0.5 hr break 1200-1230)
(***3.5 hr break 1030-1400)

GRAPEVINE CAMP
(81.3 mi RL, kitchen)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	(no direct light)	
FEB	08:00	10:00*
MAR	07:30	13:30**
APR	07:00	13:30
MAY	07:00	14:00
JUN	07:00	14:30
JUL	07:00	14:00
AUG	07:00	14:00
SEP	07:30	13:30**
OCT	07:30	13:00**
NOV	(no direct light)	
DEC	(no direct light)	

(*0.5 hr break 0900-0930)
(**2 hr break 1000-1200)

LOWER CREMATION
(87.2 mi RL, lower camp)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	10:30	12:00
FEB	10:30	13:00
MAR	07:30	15:30
APR	07:30	17:00
MAY	07:30	18:00
JUN	07:30	18:00
JUL	07:30	18:00
AUG	07:30	17:30
SEP	07:30	16:00
OCT	10:00	14:30
NOV	10:30	12:00
DEC	10:30	12:00

TRINITY CREEK CAMP
(91.6 mi RR, main camp)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	08:00	12:00
FEB	08:00	15:00
MAR	08:00	17:00
APR	08:00	17:00
MAY	08:00	16:30
JUN	08:00	16:30
JUL	08:00	16:30
AUG	08:00	17:00
SEP	08:00	17:00
OCT	08:00	15:00
NOV	08:00	12:30
DEC	08:00	11:00*

(*0.5 hr break 0900-0930)

103 MI RR CAMP
(main camp)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	10:00	14:30
FEB	09:30	15:00
MAR	09:00	15:00
APR	09:00	15:00
MAY	08:30	15:30
JUN	08:30	15:30
JUL	08:30	15:30
AUG	08:30	15:30
SEP	09:00	15:00
OCT	09:30	15:00
NOV	10:00	14:30
DEC	10:00	14:30

110 MI RR CAMP
(109.4 mi RR, main camp)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	08:00	15:00
FEB	08:00	16:00
MAR	08:00	17:30
APR	08:00	17:30
MAY	08:00	17:30
JUN	08:00	17:30
JUL	08:00	17:30
AUG	08:00	17:30
SEP	08:00	17:30
OCT	08:00	16:30
NOV	08:00	15:30
DEC	08:00	14:30

LOWER GARNET
(114.1 mi RR, kitchen)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	10:00	14:30
FEB	09:30	14:30
MAR	09:00	14:30
APR	08:30	15:00
MAY	08:30	15:30
JUN	08:30	15:30
JUL	08:30	15:30
AUG	08:00	15:00
SEP	08:30	14:30
OCT	09:30	14:30
NOV	10:00	14:30
DEC	10:30	14:30

ROSS WHEELER CAMP
(107.8 mi RL, aka:Upper Bass)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	09:00	13:30
FEB	08:30	14:00
MAR	08:00	14:30
APR	07:00	15:00
MAY	06:30	15:30
JUN	06:30	15:30
JUL	06:30	15:30
AUG	07:00	15:00
SEP	07:30	14:30
OCT	08:30	14:00
NOV	09:00	13:30
DEC	09:30	13:30

LOWER BASS CAMP
(108.2 mi RR, main camp)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	08:30	14:30
FEB	07:30	16:30
MAR	07:30	17:00
APR	07:00	17:00
MAY	07:00	17:00
JUN	07:00	17:00
JUL	07:00	17:00
AUG	07:00	17:00
SEP	07:30	17:00
OCT	07:30	16:30
NOV	08:30	14:30
DEC	08:30	14:30

ELVES CHASM
(116.6 mi RL, lower area)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	(no direct light)	
FEB	(no direct light)	
MAR	14:30	15:00
APR	13:00	15:00
MAY	11:30	15:00
JUN	11:30	14:30
JUL	11:30	14:30
AUG	12:30	15:00
SEP	14:00	14:30
OCT	(no direct light)	
NOV	(no direct light)	
DEC	(no direct light)	

118 MI RR CAMP
(main camp)

<u>Month</u>	<u>Sunrise</u>	<u>Sunset</u>
JAN	10:30	14:00
FEB	10:30	14:30
MAR	10:00	14:30
APR	10:00	16:30
MAY	10:00	16:00
JUN	10:00	16:00
JUL	10:00	16:00
AUG	10:00	15:30
SEP	10:00	15:00
OCT	10:00	14:30
NOV	10:30	14:00
DEC	10:30	14:00