

Stargazing in Missouri River Country is a magical experience. You've seen the photos of unbelievable views of the cosmos and now you want to—no, have to—see them in person. But it can be hard to figure out when, where and how to get started. Good news—we are here to help! Whether you are a rough and ready camper or prefer to retreat indoors after outdoor adventures, we have a plan for you. Be sure to check out our best-practice tips and tricks, set your itinerary, and be prepared for the night sky show of a lifetime.

# **Tips and Tricks**

## **Night Sky Calculator**

Not all night skies are created equal! Not only does place matter when it comes to dark skies, but timing matters, too. It is always darkest during a new moon, and "midnight" does not always mean 12am! Use a night sky calculator to determine when the sky will be the darkest during your trip. Simply input your location in Missouri River Country, select the date you will be there, and calculate the best time to check out the stars.

View calculator here: cambridgeincolour.com/tutorials/moon-night-calculator.htm

## Night Sky App

Come prepared to take in all the galaxies! Download a dark sky app in the App Store. We recommend purchasing SkyView—just point your phone at the night sky to learn what stars, constellations, and planets are in view. And bonus... no cell service required!

### **Gear to Remember**

It is always best to be prepared when it comes to weather in Montana. Even on the warmest days, the nights can be cool, so be sure to pack layers including a jacket, a hat or beanie and gloves, even during the summer months. During the fall through spring, come prepared with heavier jackets, warm boots and socks, too. We recommend bringing camp chairs or a picnic blanket to sit on and enjoy the show.

## Photographing the Night Sky

Photographing the night sky is not as simple as point-and-shoot photography. It is a skill that takes knowledge of cameras, some gear, and patience. Here is a helpful guide to taking professional level night sky photos:

Learn how here: <u>digital-photography-school.com/beginners-tips-for-night-sky-and-star-photography</u>

## For the Hotel Goers

Stay at a hotel in the town of Fort Peck or Glasgow.

Enjoy amenities in Fort Peck like restaurants and the Fort Peck Theatre by day, or spend the day on the lake! Check out the "Middle of Nowhere" in Glasgow and shop, dine out, and visit Busted Knuckle Brewery.

Set an alarm (or stay up!) until it is time to take off for stargazing based on your night sky calculations.

Drive south on MT-24 towards Rock Creek Marina and find your perfect spot to look at the stars!

### For the Happy Campers

Stay at a designated campground, like Hell Creek State Park, Brush Lake State Park, or Rock Creek Campground.

Enjoy outdoor activities like boating, fishing, and hiking by day and eat your meals at the campground's picnic tables, or travel into nearby towns and have dinner at one of Missouri River Country's great dining establishments.

Cozy into your tent or camper and set an alarm (or stay up around a campfire!) until it is the perfect time for star gazing based on your night sky calculations.

Adventure a little ways away from the campground's lighting and enjoy the show!

### For the Adventure Seekers

Stay on any public lands your heart desires in Missouri River Country (but be sure to follow Leave No Trace principles: https://Int.org). We recommend somewhere like Seven Sisters Wildlife Management Area or the Little Rocky Mountains). Be sure to check out the dark sky map and pick a place in the darkest areas available!

Spend the day hiking, fishing, wildlife viewing, or relaxing in nature.

Set an alarm based on your night sky calculations.

Roll out of your tent or camper and be immediately immersed in the middle of the best night sky show around!

When visiting Northeast Montana, prepare yourself for a star-studded evening. More room to roam means more space to explore, and on the prairie, that means 360 degrees of spectacular views of the Milky Way and Northern Lights. Trust us - this is a place you have to see for yourself. Below are a few suggested places to stargaze, however, when light pollution is next to none and the expanse of open spaces stretch for miles, pretty much anywhere is the best seat in the house.

## Where to Stargaze

### **The Pines Recreation Area**

Aptly named for the pine trees in the area, The Pines Recreation Area is located along Fort Peck Lake. With great points along high hills, this spot is great for a night hike with stunning views.

### Seven Sisters Wildlife Management Area

Located just south of Sidney, Seven Sisters Wildlife Management Area is a hidden gem located along the Yellowstone River.

### **Little Rocky Mountains**

The Little Rocky Mountains is a prominent mountain range in the heart of Missouri River Country. Located far from any major towns, this is a great spot to take in the stars.

### Hell Creek State Park

Situated on Fort Peck Lake, Hell Creek State Park is located in the darkest night sky rating possible. It also plays host to a campground, making it a convenient place to watch the show.

### **Brush Lake State Park**

Located on the eastern border of Montana and North Dakota, Brush Lake State Park is a quiet and beautiful place to spend the evening watching the galaxies.

# **Night Skies Maps**

Truly dark night skies dance above you in Missouri River Country, where the vast majority of our region's skies remain uninterrupted from light pollution. Light pollution occurs in areas where man-made lights, such as those found in towns and cities, brighten the skies and cause disruption to the clarity and visibility. Even smaller towns can leave a trail of light pollution behind. According to Sky and Telescope, "a typical suburban sky today is about 5 to 10 times brighter at the zenith than the natural sky. In city centers the zenith may be 25 or 50 times brighter than the natural background."



Light pollution map of the United States. Montana shows very little light pollution.

This means that in order to see the galaxies uninterrupted, you have to travel far away from any town or city, to somewhere like, say, the middle of nowhere. Luckily for us in Missouri River Country, we are quite literally the middle of nowhere and proud of it According to an Oxford University study which used population data to find the literal "middle of nowhere," the top three most remote spots in the country are found right here in Northeast Montana, with Glasgow taking the number one spot and Scobey and Wolf Point claiming second and third. Less people means less lights, which means less light pollution. Take in some of the darkest night skies in the country here in Missouri River Country, where every night is a star-studded affair.



Light pollution map of Montana. Missouri River Country is outlined in the Northeast corner.