

EGK Dark Sky Site Guidelines

July 20, 2021

Overview

Purpose

The purpose of this guideline is to provide instructions regarding the use of Denver Astronomical Society Dark Sky sites.

Scope

The scope of this guideline covers usage of the Edmund G. Kline Dark Sky site.

Responsibilities

Members of the Denver Astronomical Society (DAS) that are appointed to oversee the EGK dark sky site are responsible for providing guidance to members and visitors regarding usage of the dark sky site.

The current list of Dark Sky members is as follows:

- Darrell Dodge (Acting Chair)
- Ted Cox
- Joe Gafford
- Jon Groubert
- Stuart Hutchins
- Bill Kast
- Lloyd Linnell
- Digby Kirby
- Ed Scholes
- Greg Wimpey
- Dan Wray

Member Responsibility

It is the responsibility of members to use the DAS Dark Sky site in accordance with DAS policies governing the usage of the site as outlined in this document. Violations of rules may result in expulsion from the site and possible revocation of membership.

By accessing the dark sky site, members agree to the rules governing the usage of the dark sky site.

EGK Dark Sky Site Guidelines

July 20, 2021

Guidelines

To keep everyone's experience at the dark site a pleasant and productive one, the DAS E-board and the Dark Site Committee instituted some guidelines. Please familiarize yourself with these guidelines.

Orientations

Dark Site orientations are provided for DAS members according to the following:

Item	Guidance
Scheduling	<p>The following describes scheduling requirements:</p> <ul style="list-style-type: none">• Dark Site Orientations are provided for DAS members on the Saturday evening of Dark Sky Weekends, starting approximately one hour before sundown.• No orientations will be provided after dark.• Please check the weather and observing conditions before driving to the Dark Site for an orientation.• Orientations will not be provided when weather conditions are not suitable for observing.
Orientation Areas	<p>The orientations provide information on the following areas:</p> <ul style="list-style-type: none">• Accessing the warming hut.• Electrical power.• Vault toilet.• Using features of the warming hut.• Light control.• Rodent control.• Overall site safety and first aid.• Proper use of the wind screens.
Specialty Items	<p>Directions for use of the 17.5-inch DAS444 Dobsonian Telescope and the Brooks Observatory and its 14-inch Schmidt-Cassegrain telescope are not included in the orientation and must be requested and provided separately.</p>

EGK Dark Sky Site Guidelines

July 20, 2021

Guidelines

Location

The location of the EGK Dark Sky site is approximately 60 miles east of the junction of I-25 and I-70 in Denver. The following are geo-coordinates:

Latitude: N 39: 38: 39.1
Longitude: W 103: 55: 45.2
Elevation: 1569 meters

The observatory code for reporting astrometric measurements is H05. When sending in astrometric measurements, use the code if you are doing it on the EGK site only (upper, South end of the site). This is for sending in asteroid, comet, and supernova reports. No longitude and latitude information are needed.

The location of the EGK can also be found using Google Maps by typing in “EGK Dark Site.”

For specific driving directions, see Attachment C – Driving Directions.

EGK Dark Sky Site Guidelines

July 20, 2021

Guidelines

Access

The following provides guidance on site access:

Item	Guidance
Front Gate	<p>There is a combination lock on the front gate at the Edmund Kline Dark Site.</p> <p>Any DAS member in good standing may obtain the gate combination by emailing the Dark Site Chair at darksite@denverastro.org.</p>
Power box, warming hut, vault toilet and Tuff Shed	<p>New members can receive the combinations to the power box, the warming hut (and access to the key to the vault toilet), and Tuff Shed after they have received a site orientation from a member of the Dark Site Committee.</p> <p>Note:</p> <p>The storage building (installed June 2017) is for storage of Dark Site tools, building materials, and cleaning supplies.</p> <ul style="list-style-type: none">• It is not intended for storage of astronomical equipment.• No gasoline cans are to be stored in the Tuff Shed.
Capacity	<p>The capacity of the dark sky site is 25 people at any one time (unless otherwise noted).</p>
Closures	<p>General access to the EGK or aspects of it may be limited dependent on circumstances.</p> <ul style="list-style-type: none">• For example, warming hut and the Brooke's Observatory may be closed due to COVID restrictions.• See the EGK web page for specific closures.

EGK Dark Sky Site Guidelines

July 20, 2021

Guidelines

Warming Hut Rules

The following are guidelines for the warming hut.

Item	Guidance
Usage log	All members and guests must sign in on the log in the warming hut.
Cooking	The following are guidelines related to food preparation: <ul style="list-style-type: none">• You may warm drinks or packaged meals in the microwave, it is not there for cooking since we have no water to clean up. If you spill, please clean up after yourself.• Heat water for instant beverages using the provided Pyrex measuring cups. Please do not use the Pyrex cups for mixing drinks or soup.• No pots and pans, food, appliances, supplies or other personal possessions are to be left in the hut.• Please clean up all food that drops or is spilled, otherwise it will attract rodents.
Sleeping	No sleeping overnight in the hut or elsewhere on the site. <ul style="list-style-type: none">• Short naps in your vehicle are permitted. We would prefer you get your nap rather than falling asleep on the road.• The site is not zoned for overnight stays.
Exit	The last people on the site must turn off the lights and the heat. <ul style="list-style-type: none">• The timer is mechanical and should be left running.• Make sure the windows are closed and tightly locked.
Cleanliness	The following are related to general site maintenance. <ul style="list-style-type: none">• Wipe your feet carefully before entering the warming hut.• Do not donate furniture or other things unless you clear it with the Dark Site committee first.• Clean up after yourself before you leave the site.

EGK Dark Sky Site Guidelines

July 20, 2021

Guidelines

Dark Site Usage

The following guidelines primarily refer to mobility around the dark sky site and general courtesy when using the site.

Item	Guidance
Driving and Parking	<p>The following outlines general procedures related to arriving and parking at the site.</p> <p>Before Dark Arrival</p> <ul style="list-style-type: none">• If you arrive before dark, position your car so you can drive out directly instead of using your back up lights.• Before dark arrival is preferred and encouraged. <p>After Dark Arrival</p> <ul style="list-style-type: none">• If you must arrive after dark, please stop at the entrance, turn off your headlights, and wait until someone comes out to help guide you in with a red flashlight.• If no one comes, please walk down the driveway to the observing area to ask someone to help.• If you arrive after dark, drive into the parking space head first, following the directions of the person who is guiding you. <p>Note:</p> <ul style="list-style-type: none">• Driving into the site after dark on a Dark Sky Weekend is dangerous, particularly if you have never been there before.• Drive carefully on the road to the site (CR-241), there are often potholes, blind spots in the low areas and you may encounter cattle, deer and pronghorns in or near the road at times.• Local traffic travels very fast on the gravel CR241 to and past the site.
First person at the site	If you are the first person to arrive at the site, please leave the gate open and attached to the wooden pole with the bungee cord.

EGK Dark Sky Site Guidelines

July 20, 2021

Guidelines

Dark Site Usage

Item	Guidance
Site login	After parking your car, sign the logbook in the warming hut. If you are a new member, ask if a Dark Site Committee member or an experienced site user is present to give you a site orientation.
Checkout and Exit Procedures	Designate the last person to close up the site. See Attachment A – Checkout Process.
Light usage	White light disrupts the eye's dark adaptation and can ruin astrophotography. <ul style="list-style-type: none">• Use low intensity red lights, preferably hand-held.• Head lamps are not preferred because they can shine directly into people's faces.
Astro-photography	Astro photographers may wish to use the South field since it is somewhat isolated from the rest of the area. However, the South field has no power.
Maintenance	All visitors to the dark sky site must keep the site clean and neat and participate in clean up duties as required or necessitated.
Concrete Pads	DAS members have priority usage at the concrete pads. Holding a pad for guests is not allowed.
Clothing	Wear or bring warm clothing: leather shoes or boots; gloves; hat; long pants; sweater; jacket. The nights can be surprisingly cold in the summer and extremely cold in winter.
Food	Bring drinking water and snacks. Hot drinks can help you survive the night! Heat up water for hot drinks in the warming hut.
Backup Power	Bring a multi-purpose 11-20 Amp-Hr battery in case power is lost, all pads are occupied, your car battery dies or a tire goes flat. Also bring extension cords.

EGK Dark Sky Site Guidelines

July 20, 2021

Guidelines

Dark Site Usage

Item	Guidance
Common Courtesy	<p>When approaching the telescope of someone who does not know you, introduce yourself and ask before looking through the scope.</p> <ul style="list-style-type: none">• Most members will be happy to share the view through their scopes.• Astrophotographers will probably be happy to show you the image they are taking on their computers.
Prohibited Items	<p>To make the site enjoyable for everyone, smoking, alcohol or drug use are strictly prohibited at the site. Any music played must be appropriate and at low volume.</p> <p>Violations of these rules may result in expulsion from the site and possible revocation of membership.</p>

Emergency Information

In the case of emergencies requiring first responders dial 911. Locations and instructions are found in Attachment A – Emergency Information.

See Attachment A – Emergency Information.

EGK Dark Sky Site Guidelines

July 20, 2021

Guidelines

White or Bright Light Control

Bright or white light can impair one's eyes to dark adapt significantly. The following are Dark Sky site guidelines on light usage.

Item	Guidance
Auto Lights	<p>Before visiting the site, find a way to turn off all vehicle head, dome, door, running, and trunk lights.</p> <ul style="list-style-type: none">• If a light can't be turned off, pull the fuse, use layered red brake light tape or just duct tape over it.• Headlights can often be turned off while the vehicle is running by applying hand or mechanical brakes one or two clicks• Read THIS ARTICLE about how to prepare a vehicle for Dark Site use. <p>Note: Arrive before dark. This alleviates many vehicles' light problems.</p>
Parking	<p>Parking guidelines:</p> <ul style="list-style-type: none">• Park your car so that you can leave the site without using your backup lights.• If arriving in the dark, stop at the gate and wait until someone comes up to guide you in to a spot front first. If no one comes, please walk down to the pads and request help.
Red light usage	<p>Use only dim red flashlights. Never shine a flashlight in someone's face or on their scope.</p>

EGK Dark Sky Site Guidelines

July 20, 2021

Guidelines

Brooks Observatory & DAS444 Telescope

Details are being established for access to, and use of, the observatory/14.5 SCT and DAS444.

- Committee members who are familiar with operation of the Brooks Observatory and DAS444 telescope are developing training programs that will make the observatory and DAS444 available for observations on Dark Sky Weekends and other times.
- Members visiting the Dark Site are encouraged to contact the Dark Site committee if the observatory appears to be damaged or if it appears to have been tampered with.
- Society members are encouraged to communicate their interest in using the Brooks Observatory or the DAS444 telescope in writing to the **Dark Site Chair** (Observatory) and **DAS444 Telescope Director**. Please contact the Dark Site Committee and/or the DAS External Outreach Coordinator to check on availability and make arrangements.

Portable Wind Screens

There are footings for portable wind screen poles at six of the 14 observing pads — five for 12-ft screens and one for a 14-ft screen (“permanent” SE pad).

- One pole is designed as a center pole for an optional double screen on the 20-foot NW pad. Wind screens are intended for use by members or member-hosted public observing events only.
- Please see the **Wind Screen Manual** for detailed information on installation, use, and care of the screens. **Please follow the instructions.**
- Misuse of the screens could result in damage to the screens, personal observing equipment, or even personal injury.
- The metal poles must be inserted in the PVC sleeves first before installing the top cross-member. There is a small ladder in the warming hut to assist.
- The woven plastic screens must be stowed properly in the garden box inside the warming hut. The screens should be **folded over once** (length-wise, with the center grommets exposed) and **rolled (not folded)**. The screens are damaged when folded into squares.
- Information on the wind screens will be included in Dark Site Orientations. If you have questions about how to use the screens, please see the manual or email the Dark Site Committee.

EGK Dark Sky Site Guidelines

July 20, 2021

Guidelines

Guest Policy

The Edmund G. Kline Dark Site, while for the exclusive use of the membership for serious observing, will allow guests of members on a limited basis.

- The Dark Site is in a great plains' environment with small and large predators and other hazards, which are exacerbated at night. **In general, it is not possible to host non-members or large groups due to liability concerns.**
- We allow members **who have previously received site orientations** to bring one or two family members or personal friends who are not members to the Dark Site. Please do not abuse the privilege.
- Members are responsible for educating their guests about the rules and must not provide site access information to non-members.
- Small children should not be allowed to "run free" or unsupervised on the site.
- It is recommended that prospective members and others **submit payment for a DAS membership application at least one week before accessing the site.**
- DAS members have priority usage of the concrete pads. Holding a pad for friends is not allowed.

EGK Dark Sky Site Guidelines

July 20, 2021

Attachments

Attachment	Description
A	Emergency Information
B	Checkout Process
C	Driving Directions

EGK Dark Sky Site Guidelines

July 20, 2021

Attachment A – Emergency Information

Emergency Information

In the event of an emergency requiring assistance from medical, fire or law enforcement personnel, please call 911 and follow the instructions provided by the operator.

- Medical and fire services are available at Deer Trail, Bennett, and Strasburg. These teams will be toned by the operator until an available team is found.
- If possible, stay on the line until a team is located to determine if it is best to stay at the site or meet them at the preferred rendezvous location, which is the “Shell service station in Deer Trail on the west side of I-70.”
- The location of the Dark Site should be given as “4120 South Bixler Road (CR 241), 1.4 miles north of Jolly Road.”
- There is a first aid kit in the warming hut for minor emergencies that contains a first aid book, scissors and other equipment, and a large selection of bandages, pads, ointments and creams, towelettes and other items. When you use first aid supplies, please make a note of what you used in the log in the warming hut.
- There are two fire extinguishers on site in the warming hut.

EGK Dark Sky Site Guidelines

July 20, 2021

Attachment B – Checkout Process

The following is the checkout process for the last designate person leaving the dark sky site.

Item	Requirement
Storage shed	Check that the storage shed is locked (both locks).
Vault Toilet	Lock the vault toilet.
Warming Hut	Securing the warming hut: <ul style="list-style-type: none">• Turn off the lights and lock the windows in the warming hut (the timer will automatically run down)• Lock the warming hut
Wind screens	Wind screen stowage: <ul style="list-style-type: none">• Make sure that the plastic wind screens and bungees are properly stowed in the garden box and that the lid is closed.• Check that all windscreen poles are stowed next to the observatory (except the semi-permanent poles at the SE pad).
Observatory	Check that the observatory is closed and locked (if not, and you don't have a key, please call or text 303-668-1630).
Power	Turning off power: <ul style="list-style-type: none">• Turn off all the breakers in the outside breaker box• Lock the breaker box
Gate	Close and lock the gate to the site.

EGK Dark Sky Site Guidelines

July 20, 2021

Attachment C – Driving Directions

Driving Directions

The EGK site is about 60 miles east of the “mousetrap” in downtown Denver.

- If you can use Google Maps, just enter “EGK Dark Site” **when in Google Maps** for directions.
- I-70 East to the Deer Trail exit (exit 328), turn left at the end of the exit ramp, and bear left again on CR 217 (passing the Phillips 66 station).
- Take CR 217 just over 1/2 mile, and turn right (East) onto CR 34 (Jolly Road). Stay on CR 34 about 6 miles until you get to CR 241 (Bixler Road).
- Turn left (North) onto CR 241 and continue about 1.4 miles. You’ll see high poles and a wide gate on the right (East) side of the road.

Directions for arrival from the North.

- Take I-70 eastbound to exit 316 (Byers).
- Turn left at end of ramp which puts you on eastbound US-36. Take US-36 east 17.2 miles to CR 241.
- Turn right (south) onto CR 241 and continue for 6.2 miles.
- The site entrance is on the left (east) side between two tall posts. The entrance can be difficult to spot. Note that a small grove of trees is directly East of the site.

Note: Travel distance from Denver using the North route is actually 3.9 miles shorter than the traditional route, but takes longer. The first 5 miles of CR 241 going south from US-36 is narrow and somewhat rough. Be careful.

Local Amenities

On the way to the site, the best place to provision is at the Bennett I-70 exit, where there is a large King Soopers grocery store with a coffee shop, several fast-food restaurants, a large truck stop, two gas stations, and a large ACE hardware store. Other stores are at Watkins, Strasburg and Byers (North of I-70). There is a sit-down and take-out Mexican restaurant (**Coronas Mexican Grill**) at Strasburg (drive North, then West on Colfax Ave). Th