Name	Dates	Peak	ZHR	Parent body
October Camelopardalids	5 Oct – 6 Oct	6-Oct	5	*undiscovered (long period)*
October Draconids	6 Oct – 10 Oct	9-Oct	5	21P/Giacobini-Zinner
Epsilon Geminids	14 Oct – 27 Oct	18-Oct	3	C/1964 N1 (Ikeya)
Orionids	2 Oct – 7 Nov	21-Oct	20	1P/Halley
Leonis Minorids	19 Oct – 27 Oct	24-Oct	2	C/1739 K1
Southern Taurids	20 Sep – 20 Nov	5-Nov	7	2P/Encke
Northern Taurids	20 Oct – 10 Dec	12-Nov	5	2004 TG10
Leonids	6 Nov – 30 Nov	17-Nov	15	55P/Tempel–Tuttle
Alpha Monocerotids	15 Nov – 25 Nov	22-Nov	variable	*undiscovered (long period)*
November Orionids	13 Nov – 6 Dec	28-Nov	3	*Probably undiscovered (moderate period, probably disintegrated)*
Phoenicids	1 Dec – 5 Dec	2-Dec	variable	289P/Blanpain
Puppid-Velids	1 Dec – 15 Dec	multiple	10	*undiscovered*
Monocerotids	1 Dec – 19 Dec	9-Dec	3	C/1917 F1 (Mellish)
Sigma Hydrids	3 Dec – 20 Dec	9-Dec	7	*possibly C/2023 P1 (Nishimura)*
Geminids	4 Dec – 20 Dec	14-Dec	150	3200 Phaethon
Comae Berenicids	4 Dec – 30 Jan	23-Dec	3	*undiscovered (moderate period)*
Ursids	17 Dec – 26 Dec	22-Dec	10	8P/Tuttle

Dates may change by 1 depending on leap years.

Chapter 7. What Can You Do With Meteor Showers?

Observing Meteors

To watch the sky for meteors takes absolutely no special equipment. You need to be comfortable if you are going to observe for more than a few minutes. A good, adjustable lounge chair whose back can go from vertical to horizontal is a good thing to have and use. So-called "gravity chairs" where the chair seat's shape doesn't change but pivots around a balance point so you are comfortable no matter what the seat's position is a fantastic investment here. For short observation periods, one to three hours you can use a ground cloth or blanket on the ground and have other blankets on top. Pillows to prop your head are very helpful and might keep you from falling asleep. A nice radio for music can be valuable. Conversation partners make this a different kind of star party.

Even in the summer, nights can get cool by dawn and since you aren't going to be moving around much, you should have clothing and blankets to keep you warm. In winter, those even sleeping bags, are absolute requirements and they must be meant for cold weather, not so much for summer uses. Even if it has been a hot day, wear long sleeves and long pants. You can get chilly quickly from lack of activity, plus you should in summer have bug spray or lotions. You're a massive target for biting insects. Have adequate liquids to drink—hot ones in a thermos or cold ones in hot weather, or both! — and snacks.

Flashlights might seem a good thing to have but make them red lights; if not already made to shine red, filter them with red cellophane or deep red nail polish, as many layers as it needs to shine red and dimly on any maps or reading material. White light at night can cause you to lose your night vision for more than a few minutes after you have adapted to the darkness. Keep the white flashlights for when you leave the group to go someplace, turning them on at some distance and in a direction away from any companions.

Meteor Showers

The preparation as written above is exactly the same, just perhaps more of it, if you plan to observe only after midnight and all the way to the dawn, regardless of when you start. Have a timepiece handy, too, or a radio that gets shortwave broadcast time signals, such as WWV and CHU time stations. You are going to need the clock for certain activities and just to keep track of the night hours. You might want to go online or to some resource and find out when twilight begins in the dawn hours.

At least three dozen meteor showers are known over the year but two of them are daytime showers, requiring radio telescopes (see the full list on pages 43-44). We have nine major showers that have hourly counts of at least 10. But that's a bit of an observa-