OBSERVATION LIST

10 Best Planetary Nebulae for Northern Observers

A curated selection of the finest planetary nebulae visible from northern latitudes (Dec > -20°). These dying stars showcase an extraordinary variety of shapes and colors, from perfect smoke rings to glowing spheres. An OIII or UHC filter dramatically improves the view for most of these objects. Sorted by brightness for progressive challenge.

10	5	1	3	1
Objects	Easy	Medium	Hard	Very Hard

Vul · Aqr · Dra · Lyr · Cyg · And · Her · UMa · Gem · Per

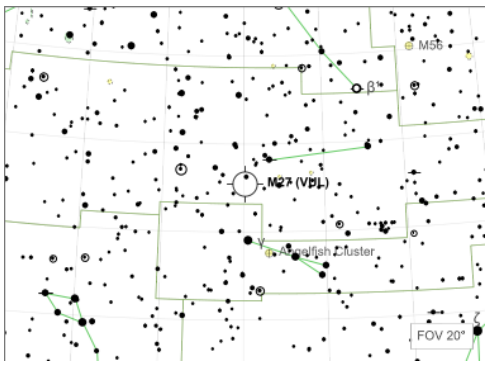
Visibility scored for: **150mm Reflector** · Bortle 4

1 M27

Easy

• Planetary Nebula · Vul · *NGC 6853*

Position	RA 19h 59m 36.3s Dec +22d 43' 16"
Magnitude	7.4 mag
Size	6.7'
Distance	1.4 kly
Visibility	9.4 / 10



Notes

The brightest and easiest planetary nebula. Visible in binoculars as a fuzzy star; in a 4" telescope at 50-100x the iconic apple-core shape emerges. An OIII filter reveals faint outer lobes extending the full dumbbell shape. A must-see for any observer.

☐ Observed

2 Saturn nebula NGC 7009

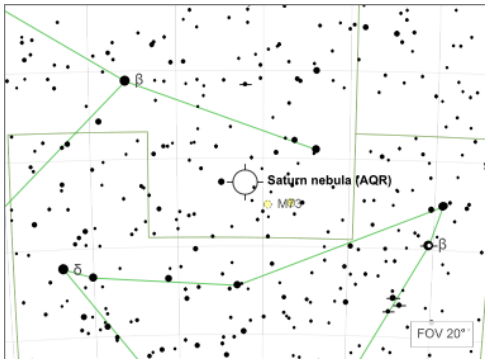
Easy

• Planetary Nebula · Aqr

Position	RA 21h 04m 12.0s Dec -11d 22' 0"
Magnitude	8.0 mag
Size	0.7' × 0.5'
Visibility	8.3 / 10

Notes

Named for the faint lateral extensions resembling Saturn's rings. Appears as a bright blue-green oval in 6"+ telescopes at 150-200x. The ansae (ring-like projections) require 8"+ aperture and steady seeing. An OIII filter enhances the disk but may hide the extensions.



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3 NGC 6543

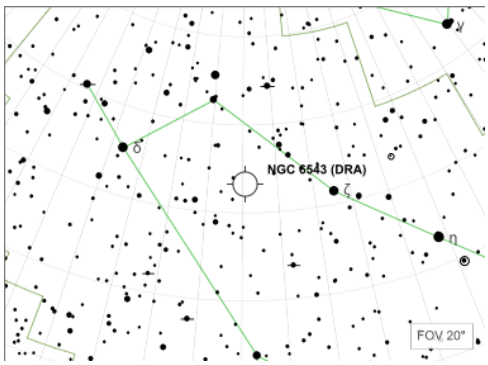
Easy

• Planetary Nebula · Dra

Position	RA 17h 58m 36.0s Dec +66d 37' 60"
Magnitude	9.0 mag
Size	0.9'
Visibility	8.1 / 10

Notes

A brilliant blue-green disk near the north ecliptic pole, visible year-round from northern latitudes. At 200x+ in 6" or larger scopes, concentric shells and a bright central star become apparent. One of the most structurally complex planetaries known, though most detail requires imaging.



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4 M57

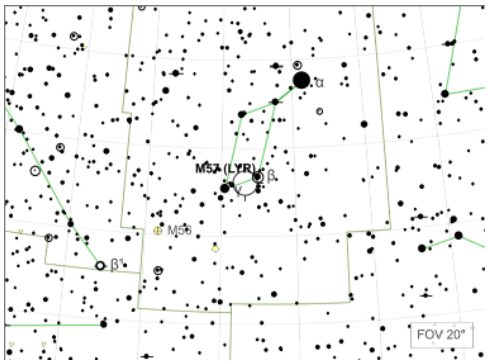
Easy

• Planetary Nebula · Lyr · *NGC 6720*

Position	RA 18h 53m 35.1s Dec +33d 01' 45"
Magnitude	8.8 mag
Size	1.3'
Distance	2.3 kly
Visibility	9.1 / 10

Notes

The quintessential planetary nebula, easily found between Beta and Gamma Lyrae. Even a 3" scope at 80x shows the ghostly smoke ring. In 8"+ aperture, look for the slightly oval shape, brighter edges, and darker center. The mag 15 central star is a challenge for 12"+ scopes.



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5 Blinking planetary NGC 6826

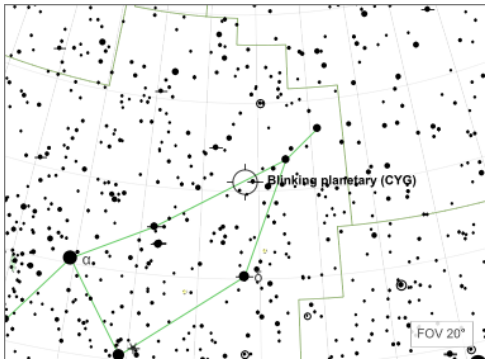
V.Hard

• Planetary Nebula · Cyg

Position	RA 19h 44m 48.0s Dec +50d 31' 0"
Magnitude	10.0 mag
Size	0.4'
Visibility	2.9 / 10

Notes

Famous for its 'blinking' effect: stare directly at it and the nebula seems to vanish, leaving only the bright central star; use averted vision and the nebula reappears. Best at 100-150x in a 4"+ telescope. The OIII filter suppresses the central star and steadies the nebular glow.



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6 Blue Snowball NGC 7662

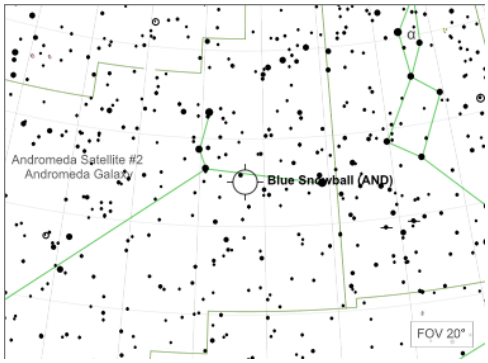
Medium

• Planetary Nebula · And

Position	RA 23h 25m 54.0s Dec +42d 32' 60"
Magnitude	9.0 mag
Size	0.3'
Visibility	7.0 / 10

Notes

A vivid blue-green disk, one of the most colorful planetaries in amateur scopes. At 200x+ in 6" aperture, a brighter inner ring becomes visible within the disk. Autumn showpiece, easy to locate near Iota Andromedae. An OIII filter enhances contrast noticeably.



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7 NGC 6210

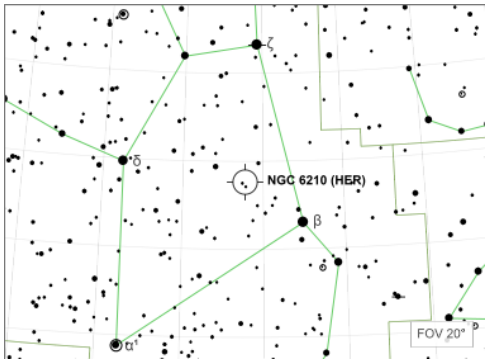
Easy

• Planetary Nebula · Her

Position	RA 16h 44m 30.0s Dec +23d 49' 0"
Magnitude	9.0 mag
Size	0.5'
Visibility	8.1 / 10

Notes

A tiny but intensely bright blue-green disk in Hercules, easily mistaken for a star at low power. Crank magnification to 200x+ to resolve the disk and see hints of elongation. High surface brightness makes it visible even in light-polluted skies without a filter.



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8 M97

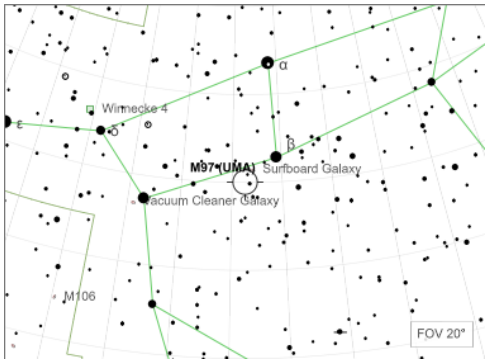
Hard

• Planetary Nebula · UMa · *NGC 3587*

Position	RA 11h 14m 47.7s Dec +55d 01' 8"
Magnitude	9.9 mag
Size	3.6'
Distance	2.6 kly
Visibility	5.0 / 10

Notes

A large, round, low-surface-brightness disk near M108 in Ursa Major. The two dark 'eye' patches that give it the Owl name require 8"+ aperture, dark skies, and an OIII or UHC filter. At 80-120x in a 6" scope, it appears as a soft, uniform gray circle. Circumpolar from mid-northern latitudes.



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9 Eskimo nebula NGC 2392

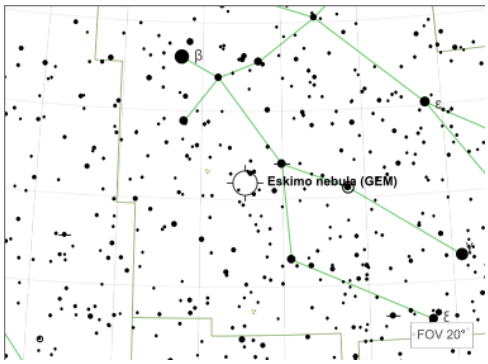
Hard

• Planetary Nebula · Gem

Position	RA 07h 29m 12.0s Dec +20d 55' 0"
Magnitude	10.0 mag
Size	0.9'
Visibility	4.0 / 10

Notes

A bright, compact planetary showing a brilliant central star surrounded by a double-shell structure. In 8"+ scopes at 200x+, the brighter inner shell and fainter outer 'parka hood' become distinct. Winter target, easy to find near Wasat (Delta Geminorum). High surface brightness rewards high magnification.



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10 M76

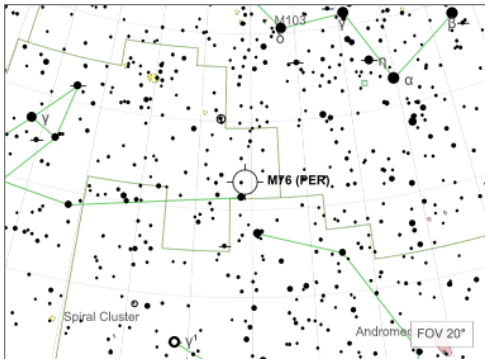
Hard

• Planetary Nebula · Per · *NGC 650, NGC 651*

Position	RA 01h 42m 24.0s Dec +51d 34' 31"
Magnitude	10.1 mag
Size	1.1'
Distance	2.5 kly
Visibility	4.8 / 10

Notes

The faintest Messier object and a miniature version of M27. A 6"+ telescope at 100-150x reveals the distinctive bi-lobed 'cork' or 'butterfly' shape. An OIII or UHC filter is almost essential to pull it from the background. Rewarding challenge that tests both aperture and sky quality.



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Observing Notes