

Turn Left at Orion

Northern Objects

Name	Constellation	Object Type	Magnitudes	Object Size/ Double Star Separation	Dob	small	binocs	For Best View: sky magnification	Coordinates Right Ascension Declination	notes	page	Season	additional description
Eta Persei	Perseus	Double Star	3.8, 8.5	29"	1	1	x	any medium	2 H 50.7 min. 55° 54'	double star near the Double Cluster	186	North	
NGC 869	Perseus	Open Cluster	5.3	18'	2	4	2	any low	2 H 19.3 min. 57° 9'	western half of the Double Cluster	186	North	open cluster; with NGC 884, half of the double cluster - look for red member stars
NGC 884	Perseus	Open Cluster	6.1	18'	2	4	2	any low	2 H 22.4 min. 57° 7'	eastern half of the Double Cluster	186	North	open cluster; with NGC 869, half of the double cluster
Struve 3053	Cassiopeia	Double Star	6.0, 7.3	15"	3	2	x	any medium	0 H 2.6 min. 66° 6'	dim double star in Cassiopeia	188	North	orange-blue pair
Eta Cassiopeiae	Cassiopeia	Double Star	3.4, 7.4	13"	3	2	x	any medium	0 H 49 min. 57° 49'	colorful double star in Cassiopeia	188	North	lovely yellow-red pair
Burnham 1	Cassiopeia	Double Star	8.6, 9.3, 8.9, 9.7	1.1", 3.7", 8.5"	3	1	x	any high	0 H 52.8 min. 56° 38'	faint quadruple enmeshed in nebula	188	North	dim quadruple star (the 4th is a tough Dob challenge), all wrapped in the faint NGC 281
Struve 163	Cassiopeia	Double Star	6.8, 9.1, 10.7	34", 114"	2	1	x	any low	1 H 51.2 min. 64° 51'	triple star in Cassiopeia	188	North	dim orange-blue double with a distant dimmer third companion
Iota Cassiopeiae	Cassiopeia	Double Star	4.6, 6.9, 9.1	2.9", 7.0"	3	1	x	steady high	2 H 29 min. 67° 24'	triple star in Cassiopeia	188	North	a nice (all white) triple star
Sigma Cassiopeiae	Cassiopeia	Double Star	5.0, 7.2	3.2"	2	1	x	steady high	23 H 59 min. 55° 45'	double star in Cassiopeia	188	North	nice, tightly spaced pair
RZ Cassiopeiae	Cassiopeia	Variable Star	6.18-7.21; 1 day, 4.7 hours		1	1	1	any low	2 H 48.8 min. 69° 39'	dramatic eclipsing variable star	188	North	rapidly changing eclipsing variable
SU Cassiopeiae	Cassiopeia	Variable Star	5.7-6.18; 1 day, 22.8 hours		1	1	1	any low	2 H 51.9 min. 68° 53'	Cepheid variable star	188	North	variable star near RZ Cassiopeiae
NGC 281	Cassiopeia	Nebula	7.4	32'	1	x	x	dark lowest	0 H 52.8 min. 56° 36'	Pacman Nebula	189	North	faint 'Pacman Nebula', wrapped around the dim but nifty quadruple star Burnham 1
Rho Cassiopeiae	Cassiopeia	Supergiant	4.5		1	1	x	any low	23 H 54.4 min. 57° 30'	supergiant star	190	North	
M52	Cassiopeia	Open Cluster	6.9	16'	3	3	1	any low	23 H 24.2 min. 61° 36'	open cluster in Cassiopeia	191	North	lovely open cluster; rich with medium brightness range and strong central concentration
NGC 7789	Cassiopeia	Open Cluster	6.7	25'	3	3	1	any low	23 H 57 min. 56° 43'	open cluster in Cassiopeia	191	North	enticing open cluster; rich with small brightness range; has something for every aperture
NGC 225	Cassiopeia	Open Cluster	7	15'	1	2	1	any low	0 H 43.4 min. 61° 47'	open cluster in Cassiopeia	192	North	open cluster; poor with small brightness range and strong central concentration
NGC 129	Cassiopeia	Open Cluster	6.5	12'	1	1	1	any low	0 H 29.8 min. 60° 14'	open cluster in Cassiopeia	193	North	open cluster; poor with medium brightness range
NGC 436	Cassiopeia	Open Cluster	8.8	5'	1	1	x	any low	1 H 15.5 min. 58° 49'	open cluster in Cassiopeia	193	North	dim little open cluster; moderately rich with large brightness range
NGC 457	Cassiopeia	Open Cluster	6.4	20'	3	2	1	any low	1 H 19 min. 58° 20'	open cluster in Cassiopeia	193	North	wonderful open cluster; rich with large brightness range
Struve 131	Cassiopeia	Double Star	7.3, 9.9	14"	1	1	x	any high	1 H 33.2 min. 60° 41'	double star in M103	194	North	
M103	Cassiopeia	Open Cluster	8.4	6'	2	1	x	any low	1 H 33.2 min. 60° 42'	open cluster in Cassiopeia	194	North	unimpressive open cluster; poor with medium brightness range
Struve 153	Cassiopeia	Double Star	9.4, 10.4	7.7"	1	1	x	any high	1 H 46.6 min. 61° 16'	double star in NGC 663	195	North	
NGC 637	Cassiopeia	Open Cluster	8.2	3'	2	1	x	any medium	1 H 41.8 min. 64° 2'	open cluster in Cassiopeia	195	North	dim little elongated open cluster; poor with large brightness range
NGC 654	Cassiopeia	Open Cluster	6.5	6'	1	1	x	any medium	1 H 43.9 min. 61° 54'	open cluster in Cassiopeia	195	North	dim little open cluster near NGC 663
NGC 659	Cassiopeia	Open Cluster	7.9	6'	2	1	x	any medium	1 H 44.2 min. 60° 43'	open cluster in Cassiopeia	195	North	dim little open cluster near NGC 664
NGC 663	Cassiopeia	Open Cluster	7.1	15'	3	3	1	any medium	1 H 46 min. 61° 16'	open cluster in Cassiopeia	195	North	pretty little open cluster; moderately rich with medium brightness range
Struve 2816	Cepheus	Triple Star	5.7, 7.5, 7.5	12", 20"	1	1	x	any high	21 H 39 min. 57° 29"	triple star, in field with Struve 2819	196	North	nice triple star in field with Struve 2819
Struve 2819	Cepheus	Double Star	7.4, 8.6	13"	2	2	x	any high	21 H 40 min. 57° 35"	double star, in field with Struve 2816	196	North	nice double star in field with Struve 2816
Delta Cephei	Cepheus	Double Star	4.2, 6.1	41"	1	1	1	any medium	22 H 29.2 min. 58° 25"	double/Cepheid variable star	196	North	wide colorless double (brighter star is a Cepheid variable)
Mu Cephei, Garnet Star	Cepheus	Carbon	7.9		1	1	1	any low	21 H 43.5 min. 58° 47'	red supergiant 'Garnet Star'	196	North	lovely red color
Struve 2815	Cepheus	Double Star	8.6, 10.0	0.9"	2	1	x	steady high	21 H 37.7 min. 57° 34"	Dob triple near Struve 2816 & 2819	197	North	dim double (Dob challenge triple) very close to Struve 2816 and Struve 2819
NGC 6543	Draco	Planetary Nebula	8.1	0.3"	2	1	x	dark high	17 H 58.6 min. 66° 38"	Cat's Eye planetary nebula in Draco	198	North	planetary nebula with a distinctive electric-blue color
Psi Draconis	Draco	Double Star	4.6, 5.6	30"	1	1	x	any low	17 H 41.9 min. 72° 8"	double star in Draco	199	North	wide, easy double near NGC 6543
M81	Ursa Major	Galaxy	7	11" by 20", NNE-SSW	3	2	1	dark low	9 H 55.6 min. 69° 4'	Ursa Major galaxy in pair with M82	200	North	bright, oval spiral galaxy; makes nice pair with M82
M82	Ursa Major	Galaxy	8.6	4" by 11", ENE-WSW	3	2	1	dark low	9 H 56.1 min. 69° 42'	Ursa Major galaxy in pair with M81	200	North	interesting, lumpy-looking edge-on spiral galaxy; makes nice pair with M81
NGC 2976	Ursa Major	Galaxy	10.1	5.9" by 2.7", NW-SE	1	x	x	dark low	9 H 47.3 min. 67° 55'	dim galaxy near M81 & M82	201	North	dim spiral galaxy near M81 and M82
NGC 3077	Ursa Major	Galaxy	10	5"	2	x	x	dark low	10 H 3.3 min. 68° 44'	dim galaxy near M81 & M83	201	North	dim spiral galaxy near M81 and M82
Alpha Ursae Minoris, Polaris	Ursa Minor	Double Star	2.1, 9.1	18"	1	1	x	steady high	2 H 31.8 min. 89° 16'	Polaris - a wide, unequal double	202	North	easy but extremely unequal double
NGC 188	Cepheus	Open Cluster	8.1	15'	2	x	x	dark low	0 H 47.5 min. 85° 15'	dim, ancient open cluster near Polaris	202	North	dim but nifty ancient open cluster; a challenging but enticing object for a dark night
M51	Canes Venatici	Galaxy	8.1	6" by 11", N-S	3	2	1	dark medium	13 H 29.9 min. 47° 12'	Whirlpool Galaxy, M51	204	North	wonderful spiral galaxy, with spiral arms appearing in a Dob on a dark night
NGC 5195	Canes Venatici	Galaxy	9.6	5.9" by 4.6", E-W	2	1	x	dark medium	13 H 30 min. 47° 16'	companion 'attached to' M51	204	North	dwarf galaxy 'attached to' the end of one of M51's arms - small but it appears quite bright
Zeta Ursae Majoris, Mizar	Ursa Major	Double Star	2.2, 3.9	14"	2	2	2	any medium	13 H 23.9 min. 54° 56"	Mizar, a bright double - and Alcor	206	North	famous, easy, bright double star
Struve 1795	Ursa Major	Double Star	6.9, 9.8	8.0"	1	x	x	steady high	13 H 59 min. 53° 6'	Dob double, near Mizar	206	North	dim Dob double
Kappa Bootis	Boötes	Double Star	4.4, 6.6	14"	2	1	x	any medium	14 H 13.5 min. 52° 0'	double star, near Mizar	206	North	subtly colored, easy double star near M101
Iota Bootis	Boötes	Double Star	4.8, 7.4	39"	1	1	x	any medium	14 H 16.2 min. 51° 22'	double star, near Mizar	206	North	wide and unimpressive double star near Iota Bootis
M101	Ursa Major	Galaxy	8.4	15'	3	2	1	dark medium	14 H 3.2 min. 54° 21'	Pinwheel galaxy	206	North	face-on spiral galaxy - on a dark night a Dob may show a hint of spiral arms