

# Astronomical League

## Planetary Nebula Observing Club

**Observed: No**

No	Obj	No	Con	M	Her	Type	Mag	Dreyer	Alias/Notes
5	ABELL	4	Per			PI Neb	14.8		PK 144-15.1
13	SH2	216	Per			PI Neb 3			NIM, PK158+00.1 See AL Planetary Club Manual
19	J	900	Gem			PI Neb 3b+2	12.4		PK 194+2.1 Jonckheere 900
20	MINK	1-7	Gem			PI Neb 2	13.4		PK 189+7.1 Minkowski 1-7
23	ABELL	21	Gem			PI Neb	10.7		PK 205+14.1
28	JNER	1	Lyn			PI Neb 4	14		PK 164+31.1 PNG 164.8+31.1
30	MINK	3-6	Pyx			PI Neb 2a	10.7		PK 254+5.1 Minkowski 3-6 Henize 2-12 Sandeak 2-29 Wray 16-25
31	NGC	2818	Pyx			PI Neb PN	11.6	PLN,PB,PL,R,VGLBM	ESO 372-13 Henize 2-23 Sanduleak 2-39
32	NGC	3132	Vel			PI Neb 4+2	8.2	PLN,VB,VL,LE*9M	Eight-burst Planetary
37	ABELL	35	Hya			PI Neb 3a	12		PK 303+40.1
39	NGC	5873	Lup			PI Neb 2	13.3	PLN,STELLAR=9.5MAG	ESO 328-34 Henize 2-121 Sanduleak 2-117
40	NGC	6026	Lup			PI Neb 4	13.2	F,S,R,GPMBM,TRI* NP	ESO 389-7 Henize 2-144 Sanduleak 2-131
43	NGC	6072	Sco			PI Neb 3a	14.1	PF,R,VGVLBM,R	ESO 389-15 Sanduleak 2-134 PK 342+10.1
47	MINK	2-9	Oph			PI Neb ?+6	14.6		PK 10+18.2 PNG 10.8+18.0 Minkowski 2-9
53	IC	4670	Sgr			PI Neb PN	12		Henize 2-305 ESO 589-20 Sanduleak 2-264 Hubble 6 PK 7+1.1 PNG 7.2+1.8
56	NGC	6565	Sgr			PI Neb 4	13.2	PLN,STELLAR	ESO 456-70 Henize 2-362 Sanduleak 2-307
60	NGC	6578	Sgr			PI Neb 2a	13.1	PLN,STELLAR=13MAG	ESO 590-12 Henize 2-381 Sanduleak 2-322
61	NGC	6620	Sgr			PI Neb 2b	15	PLN,STELLAR	ESO 522-22 Henize 2-394 Sanduleak 2-332
67	IC	1295	Sct			PI Neb 3b+2	15		PK 25-4.2 PNG 25.4-4.7
69	SH2	71	Aql			PI Neb 3b+3	13.2		PK 36-1.1 PNG 35.9-1.1 SH2- 71
88	NGC	6879	Sge			PI Neb 2a	13	PLN,STELLAR=10M	Henize 2-455 PK 57-8.1 PNG 57.2-8.9
99	SH1	89	Cyg			PI Neb 3a	14.5		PK 89-0.1 PNG 89.8-0.6 Moth Nebula
103	HU	1-2	Cyg			PI Neb 2	12.7		PK 86-8.1 PNG 86.5-8.8 Baby Dumbbell
109	JONES	1	Peg			PI Neb 3b	12.1		Jones 1 PK 104-29.1 PNG 104.2-29.6
110	ABELL	82	Cas			PI Neb	12.7		IC 1454

Sub Total: 25

**Observed: Yes**

No	Obj	No	Con	M	Her	Type	Mag	Dreyer	Alias/Notes
1	NGC	40	Cep		H58-4	PI Neb 3b+3	10.7	F,VS,R,VSMBM,*12SP	PK 120+9.1 PNG 120.0+9.8
2	NGC	246	Psc		H25-5	PI Neb 3b	8	VF,L,4*IN DIF NEB	PK 118-74.1 PNG 118.8-74.7
3	NGC	650	Per	M76	H193-1	PI Neb 3+6	12.2	VB,P OF DNEB	M 76 Little Dumbbell PK 130- 10.1 PNG 130.9-10.5
4	IC	1747	Cas			PI Neb 3b	13.6		PK 130+1.1 PNG 130.2+1.3

# Astronomical League

## Planetary Nebula Observing Club

Observed: Yes

No	Obj	No	Con	M	Her	Type	Mag	Dreyer	Alias/Notes
6	IC	289	Cas			PI Neb 4+2	12.3		Hubble 1 PK 138+2.1 PNG 138.8+2.8
7	NGC	1360	For			PI Neb 3	9.6	*8IN B,LNEB,E NS	ESO 482-7 Minkowski 1-3 PK 220-53.1
8	IC	351	Per			PI Neb 2a	12.4		PK 159-15.1 PNG 159.0-15.1
9	IC	2003	Per			PI Neb 2	12.6		PK 161-14.1 PNG 161.2-14.8
10	NGC	1501	Cam		H53-4	PI Neb 3	13.3	PLN,PB,PS,VLE,1'DIAM	PK 144+6.1 PNG 144.5+6.5
11	NGC	1514	Tau		H69-4	PI Neb 3+2	10	*9IN NEB3'DIAM	PK 165-15.1 PNG 165.5-15.2
12	NGC	1535	Eri		H26-4	PI Neb 4+2c	9.6	PLN,VB,S,R,PS,VSBM,R	PK 206-40.1 PNG 206.4-40.5
14	J	320	Ori			PI Neb 2+4	12.9		PK 190-17.1 Jonckheere 320
15	IC	418	Lep			PI Neb 4	10.7		PK 215-24.1 PNG 215.2-24.2
16	NGC	2022	Ori		H34-4	PI Neb 4+2	12.4	PLN,PB,VS,VLE	PK 196-10.1 PNG 196.6-10.9
17	IC	2149	Aur			PI Neb 3b+2	11.2		PK 166+10.1 PNG 166.1+10.4
18	IC	2165	CMa			PI Neb 3b	12.9		PK 221-12.1 PNG 221.3-12.3
21	NGC	2346	Mon		H65-4	PI Neb 3b+4	11.8	*10AFF W/ S,VF,NEB	Minkowski 1-10 Sanduleak 2-5 PK 215+3.1
22	NGC	2371	Gem		H316-2	PI Neb 3a+2	13	B,S,R,BMN,P OF DNEB	NGC 2372
24	NGC	2392	Gem		H45-4	PI Neb 3b+3b	9.9	B,S,R,*9M,*8NF100"	Eskimo Nebula PGC 21128
25	NGC	2438	Pup		H39-4	PI Neb 4+2	10.1	PLN,PB,PS,VLE,R	Sanduleak 2-13 PK 231+4.2 PNG 231.8+4.1
26	NGC	2440	Pup		H64-4	PI Neb 5+3	10.8	PLN,CB,NOT VWELL DEF	ESO 560-9 Sanduleak 2-14 PK 234+2.1
27	NGC	2452	Pup			PI Neb 4+3	12.6	PLN,F,S,LE,AM60*	ESO 493-11 RCW 17 Henize 2-4
29	NGC	2610	Hya		H35-4	PI Neb 4+2	13.6	F,S,ATTTO*13,*7NF	Sanduleak 2-27 PK 239+13.1 PNG 239.6+13.9
33	NGC	3242	Hya		H27-4	PI Neb 4+3b	8.6	PLN,VB,LE147,45"D	Ghost of Jupiter ESO 568-5
34	NGC	3587	UMa	M97		PI Neb 3a	12	PLN,VB,VL,R,VVG,VSBM	M 97 Owl Nebula PK 148+57.1 PNG 148.4+57.0
35	NGC	4361	Crv		H65-1	PI Neb 3a+2	10.3	VB,L,R,VSMBMN,R	ESO 573-19 PK 294+43.1 PNG 294.1+43.6
36	IC	3568	Cam			PI Neb 2+2a	11.6		PK 123+34.1 PNG 123.6+34.5
38	ABELL	36	Vir			PI Neb	11.8		PK 318+41.1
41	NGC	6058	Her		H637-3	PI Neb 3+2	13.3	PF,VS,R,STELLAR	PK 64+48.1 PNG 64.6+48.2
42	IC	4593	Her			PI Neb 2+2	10.9		PK 25+40.1 PNG 25.3+40.8
44	NGC	6153	Sco			PI Neb 4	11.5	PLN,STELLAR	ESO 331-6 RCW 112 Henize 2-167
45	NGC	6210	Her			PI Neb 2+3b	9.3	PLN,VB,VS,R,DISC	PK 43+37.1 PNG 43.1+37.7
46	IC	4634	Oph			PI Neb 2a+3	10.7		ESO 587-1 Henize 2-189 Sanduleak 2-164
48	NGC	6302	Sco			PI Neb 6	12.8	PB,E PF,(SWIFT,TRIP)	Bug Nebula ESO 392-5 Gum 60 RCW 124 Henize 2-204 PK 349+1.1
49	NGC	6309	Oph			PI Neb 3b+6	10.8	B,S,BET2*VNR	Box Nebula Henize 2-206 PK 9+14.1 Sanduleak 2-281
50	NGC	6337	Sco			PI Neb 4	11.9	RINGNEB,EF,S,AM ST	ESO 333-5 Henize 2-215 Sanduleak 2-191
51	NGC	6369	Oph		H11-4	PI Neb 4+2	12.9	RINGNEB,PB,S,R	ESO 520-3 Henize 2-232 Sanduleak 2-207
52	NGC	6445	Sgr		H586-2	PI Neb 3b+3	13.2	PB,PS,R,GBM,R,*15NP	Little Gem ESO 589-9 Henize 2-290
54	NGC	6543	Dra		H37-4	PI Neb 3a+2	8.8	PLN,VB,PS,SBMVSN	the Cat's Eye Nebula

# Astronomical League

## Planetary Nebula Observing Club

**Observed: Yes**

No	Obj	No	Con	M	Her	Type	Mag	Dreyer	Alias/Notes
55	NGC	6537	Sgr			PI Neb 2a+6	12.5	PLN,B,S,STELLAR	ESO 590-1 Henize 2-340 Sanduleak 2-294
57	NGC	6563	Sgr			PI Neb 3a	13.8	PLN,F,L,CE,HAZY EDGE	ESO 394-33 Henize 2-361 Sanduleak 2-308
58	NGC	6572	Oph			PI Neb 2a	9	PLN,VB,VS,R,LHAZY	PK 34+11.1 PNG 34.6+11.8
59	NGC	6567	Sgr			PI Neb 2a+3	11.7	PLN,STELL,11M,IN ACL	ESO 590-8 Henize 2-369 Sanduleak 2-314
62	NGC	6629	Sgr		H204-2	PI Neb 2a	11.6	PLNORGCL,PB,EES,R	ESO 522-26 Henize 2-399 Sanduleak 2-335
63	NGC	6644	Sgr			PI Neb 2	12.2	PLN,STELLAR	ESO 522-23 Henize 2-408 Sanduleak 2-343
64	IC	4732	Sgr			PI Neb 1	13.3		ESO 523-1 Henize 2-410 Sanduleak 2-345
65	IC	4776	Sgr			PI Neb 2a	11.7		ESO 396-2 Henize 2-421 Sanduleak 2-363
66	NGC	6720	Lyr	M57		PI Neb 4+3	9.7	RINGNEB,B,PL,CE,LYRA	M 57 Ring Nebula PK 63+13.1 PNG 63.1+13.9
68	NGC	6742	Dra		H742-3	PI Neb 2c	15	VF,STELLAR	ABELL 50 PK 78+18.1 PNG 78.5+18.7
70	NGC	6741	Aql			PI Neb 4	10.8	PLN,STELLAR	Sanduleak 2-380 Jonckheere 475 PK 33-2.1
71	NGC	6751	Aql			PI Neb 3	12.5	PB,S	Sanduleak 2-382 PK 29-5.1 PNG 29.2-5.9
72	NGC	6765	Lyr			PI Neb 5	13.1	F,S,E	Minkowski 1-68 PK 62+9.1 PNG 62.4+9.5
73	IC	4846	Aql			PI Neb 2	12.7		Sanduleak 2-385 PK 27-9.1 PNG 27.6-9.6
74	IC	1297	CrA			PI Neb	10.6		ESO 337-20 Henize 2-431 Sanduleak 2-386
75	NGC	6778	Aql			PI Neb 3+3	13.3	S,E,ILL-DEFINED DISC	Sanduleak 2-388 PK 34-6.1 PNG 34.5-6.7
76	NGC	6781	Aql		H743-3	PI Neb 3+3	11.8	PLN,F,L,R,VSBM DISC	PK 41-2.1 PNG 41.8-2.9
77	NGC	6790	Aql			PI Neb 2	10.2	PLN,B,ES,STELL=9.5M	PK 37-6.1 PNG 37.8-6.3
78	MINK	1-70	Aql			PI Neb 1	12.7		PK 45-2.1 PNG 45.4-2.7 Minkowski 1-70 Vyssotsky 2-2
79	NGC	6803	Aql			PI Neb 2a	11.3	PLN,STELLAR	PK 46-4.1 PNG 46.4-4.1
80	NGC	6804	Aql		H38-6	PI Neb 4+2	12.2	CB,S,IR,RRR	PK 45-4.1 PNG 45.7-4.5
81	NGC	6807	Aql			PI Neb 2	13.8	PLN,STELLAR	PK 42-6.1 PNG 42.9-6.9
82	HENIZ	2-438	Cyg			PI Neb 4	9.6		Henize 2-438 PK 64.7+5.0 PNG 64.7+5.0 Campbell's Hydrogen Star
83	NGC	6818	Sgr		H51-4	PI Neb 4	9.9	PLN,B,VS,R	Sanduleak 2-392 PK 25-17.1 PNG 25.8-17.9
84	NGC	6826	Cyg		H73-4	PI Neb 3a+2	9.8	PLN,B,PL,R,*11M	Blinking Planetary PK 83+12.1 PNG 83.5+12.7
85	NGC	6833	Cyg			PI Neb 2	13.8	PLN,STELLAR	PK 82+11.1 PNG 82.5+11.3
86	NGC	6853	Vul	M27		PI Neb 3+2	7.6	VB,VL,BIN,IE,DUMBBEL	M 27 Dumbbell Nebula Henize 2-452 PK 60-3.1 PNG 60.8- 3.6
87	NGC	6884	Cyg			PI Neb 2b	12.6	PLN,STELLAR	PK 82+7.1 PNG 82.1+7.0
89	NGC	6881	Cyg			PI Neb 2a+3	14.3	PLN,STELLAR	Henize 2-456 PK 74+2.1 PNG 74.5+2.1
90	NGC	6886	Sge			PI Neb 2+3	12.2	PLN,STELLAR=10M	Henize 2-458 PK 60-7.2 PNG 60.1-7.7
91	NGC	6891	Del			PI Neb 2a+2b	11.7	PLN,STELLAR=9.5M	PK 54-12.1 PNG 54.1-12.1

## Astronomical League Planetary Nebula Observing Club

**Observed: Yes**

No	Obj	No	Con	M	Her	Type	Mag	Dreyer	Alias/Notes
92	NGC	6894	Cyg		H13-4	PI Neb 4+2	14.4	RINGNEB,F,S,VVLE	Henize 2-460 PK 69-2.1 PNG 69.4-2.6
93	IC	4997	Sge			PI Neb 1	11.6		Henize 2-464 PK 58-10.1 PNG 58.3-10.9
94	NGC	6905	Del		H16-4	PI Neb 3+3	11.9	PLN,B,PS,R,4S*NR	Henize 2-466 PK 61-9.1 PNG 61.4-9.5
95	NGC	7008	Cyg		H192-1	PI Neb 3	13.3	CB,L,E45,R,**ATT	PK 93+5.2 PNG 93.4+5.4
96	NGC	7009	Aqr		H1-4	PI Neb 4+6	8.3	PLN,VB,S,ELLIPTIC	Saturn Nebula PK 37.7-34.5
97	NGC	7026	Cyg			PI Neb 3a	12.7	PB,BIN,PLN	PK 89+0.1 PNG 89.0+0.3
98	NGC	7027	Cyg			PI Neb 3a	10.4	PLN,STELLAR=8.5M	PK 84-3.1 PNG 84.9-3.4
100	NGC	7048	Cyg			PI Neb 3b	11.3	PF,PL,DIF,IR,VLBM	Hubble 9 PK 88-1.1 PNG 88.7-1.6
101	PEASE 1		Peg			PI Neb 1	14.9		CENTRAL STAR 14.9 MAG
102	IC	5117	Cyg			PI Neb 2	13.3		PK 89-5.1 PNG 89.8-5.1
104	NGC	7094	Peg			PI Neb 4	13.6	*IN EEF NEBY,VDIFFIC	Kohoutek 1-19 PK 66-28.1 PNG 66.7-28.2
105	IC	5217	Lac			PI Neb 2	12.6		PK 100-5.1 PNG 100.6-5.4
106	NGC	7293	Aqr			PI Neb 4+3	7.5	PF,VL,E OR BIN	Helix Nebula PK 36-57.1 PNG 36.1-57.1
107	NGC	7354	Cep		H705-2	PI Neb 4+3b	12.9	PLN,B,S,R,PGVLBM	PK 107+2.1 PNG 107.8+2.3
108	NGC	7662	And		H18-4	PI Neb 4+3	9.2	PLN ORRING,VB,PS,R	Blue Snowball PK 106-17.1
		<i>Sub Total:</i>				85			
		<i>Total:</i>				110			