



Celestial Birds: *Lore and Observing*

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Celestial Birds: Lore and Observing

Part 1: International Astronomical Union (1938)

- 88 official constellations
- based on Babylonian-Grecian-Roman myths
- expanded when Europeans explored the southern hemisphere
- 9 celestial birds (plus one "honorable mention")



Part 2: Indigenous Constellations—other cultures

- Muin and the 7 Bird Hunters (Mi'kmaq)
- Goose (Cree)
- Wood Pigeon (Maori)
- etc.



Part 1: IAU Constellations

Latin Name	Bird	Declination
Cygnus	Swan	+45°
Lyra*	Harp / Vulture	+35°
Aquila	Eagle	0°
Corvus	Crow	-20°
Columba	Dove	-35°
Grus	Crane	-45°
Phoenix	Phoenix	-50°
Tucana	Toucan	-65°
Pavo	Peacock	-65°
Apus	Bird of Paradise	-75°

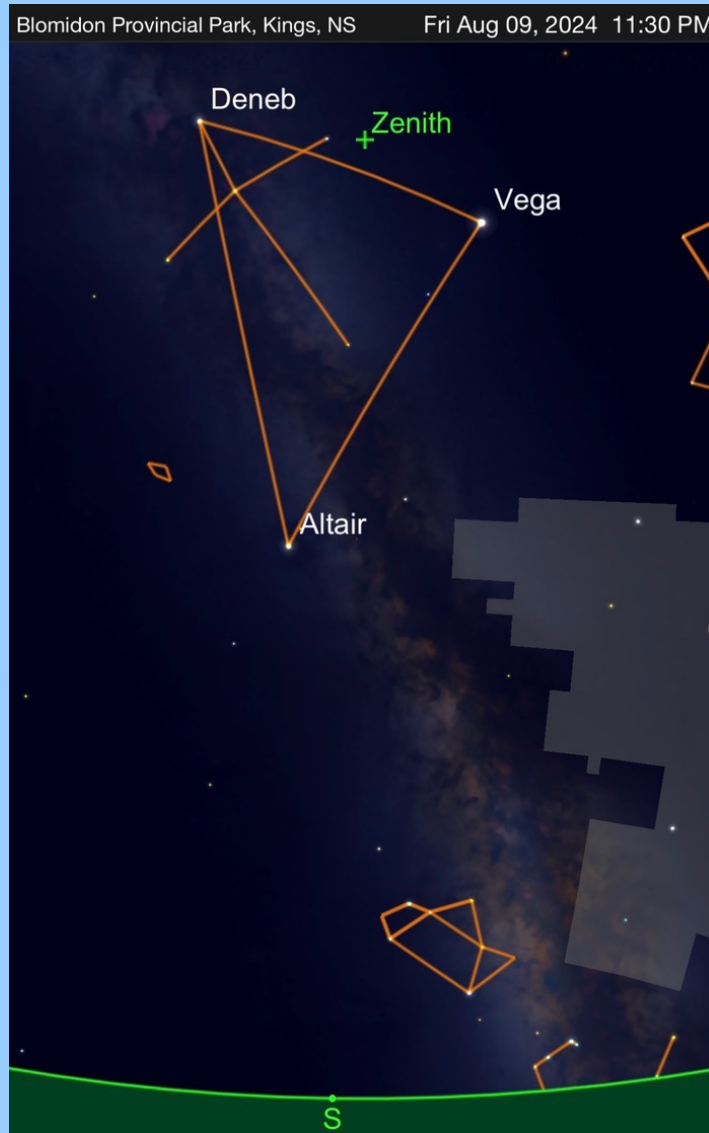
* honourable mention

Observing: Explore the Universe

Constellation	Object	Type
Cygnus	Cygnus/Deneb	constellation/star
	Albireo (Beta Cyg)	double star
	omicron ¹ Cyg	triple star
	16 Cyg	double star
Lyra	Lyra / Vega	constellation/star
	epsilon ¹ & epsilon ² Lyr	multiple star (Double Double)
	zeta ¹ & zeta ² Lyr	double star
	delta ¹ & delta ² Lyr	double star
Aquila	Aquila / Altair	constellation/star

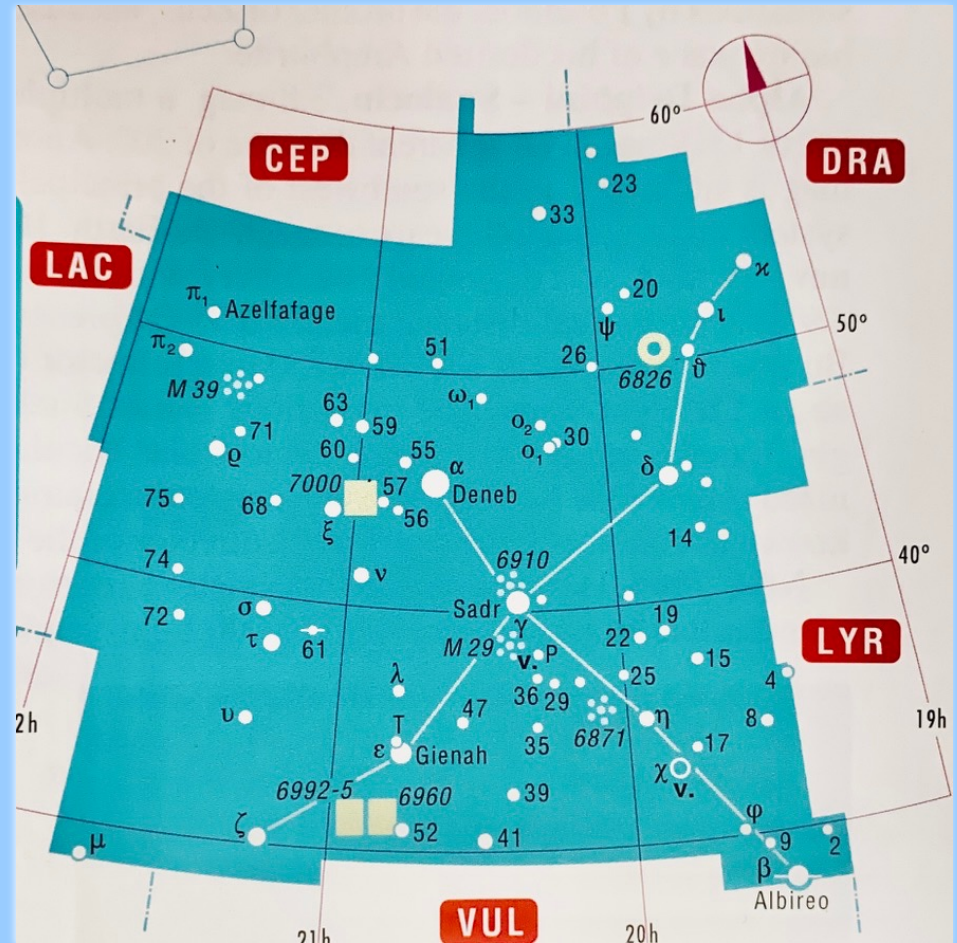
Summer Triangle

Deneb
Altair
VEga
=
DAVE



Cygnus (The Swan)

- 2 legends
 - Cycnus & Paethon
 - Zeus disguised as swan (PG-13)
- Deneb (alpha Cyg, ETU)
- Albireo (beta Cyg, ETU)
 - coloured double star
- omicron¹ Cygni (ETU)
 - triple star
- M39 open cluster (Messier)
- Finest NGC Objects:
 - North America Nebula NGC 7000
 - Veil Nebulae NGC 6992/6060
 - Blinking Planetary NGC 6826



note Gienah (wing)



Albireo (beta Cygni)

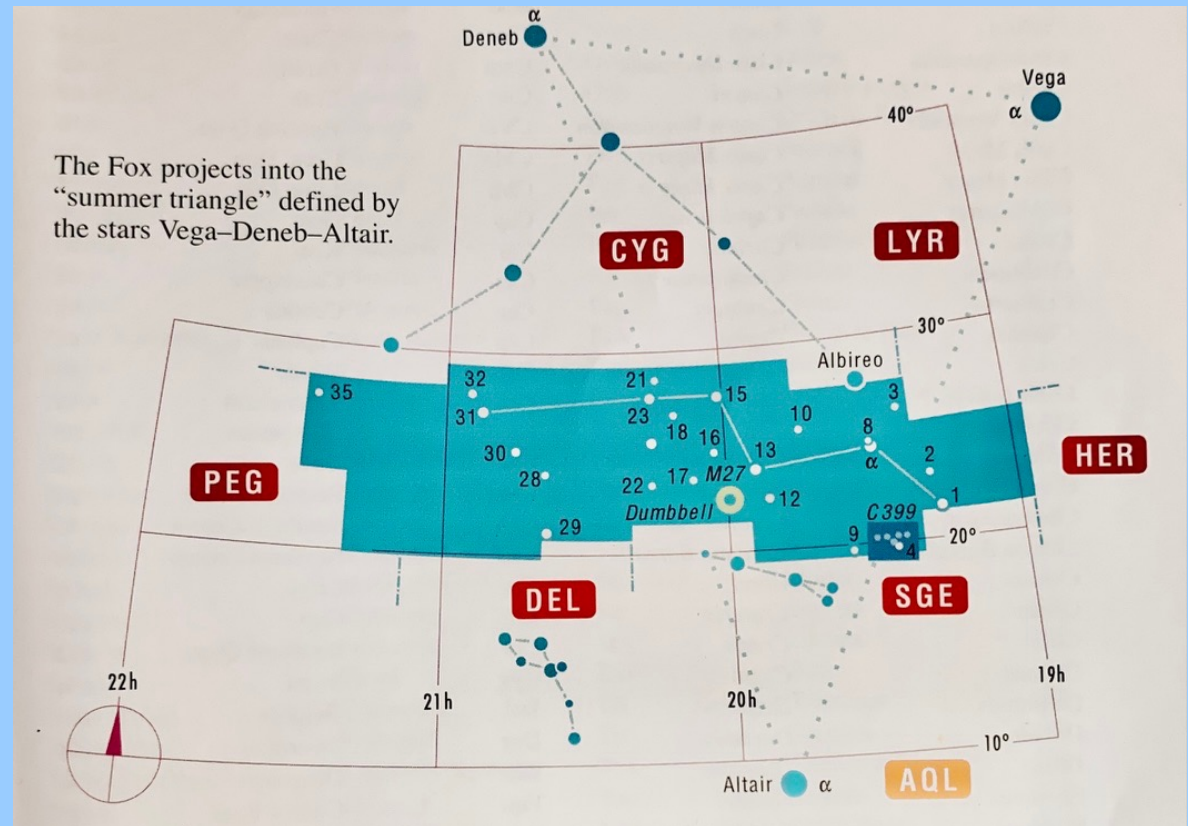
omicron¹ Cygni



photos: David Hoskin

Vulpecula (The Fox) *not a bird...*

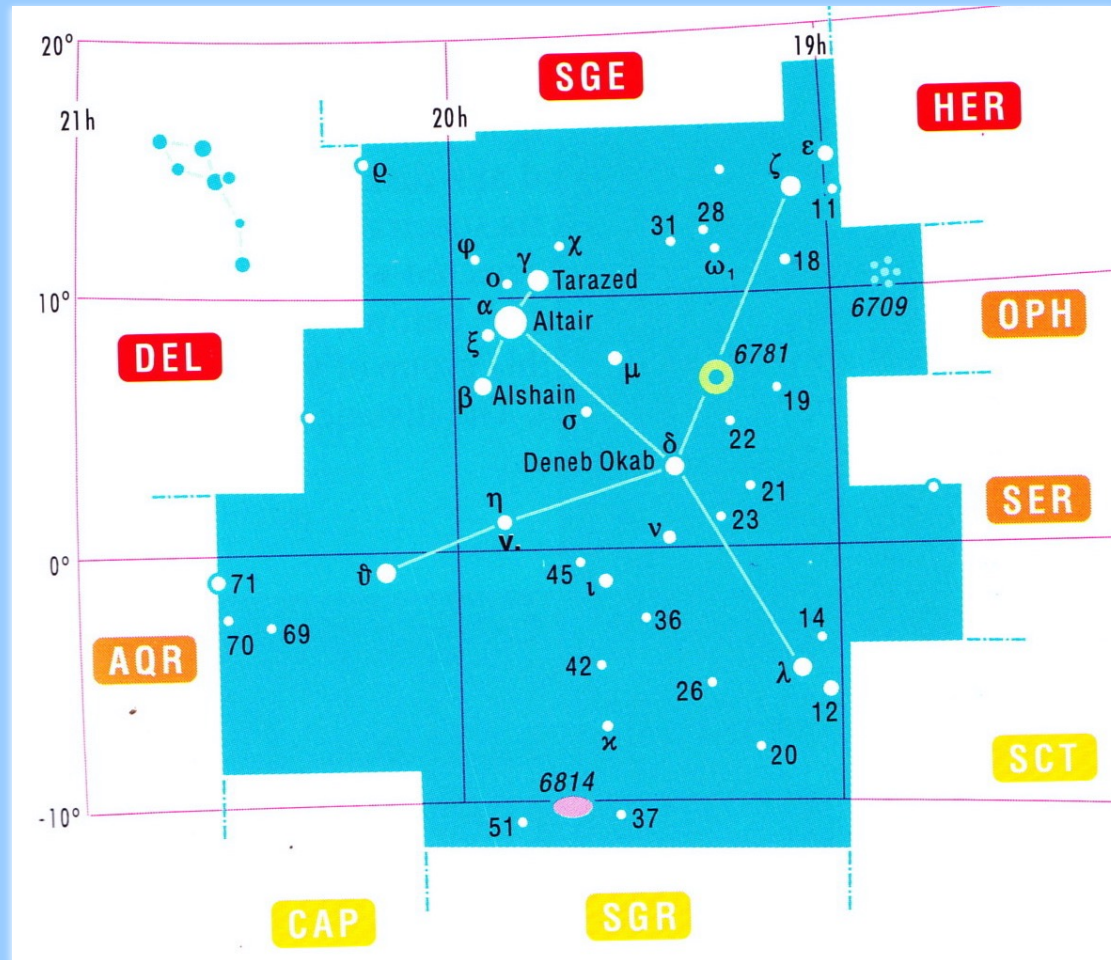
- The Coathanger
 - open cluster
 - Collinder 399
 - ETU
- Dumbbell Nebula
 - Planetary nebula
 - M27
 - Messier



...but alpha Vul is named Anser = Goose!

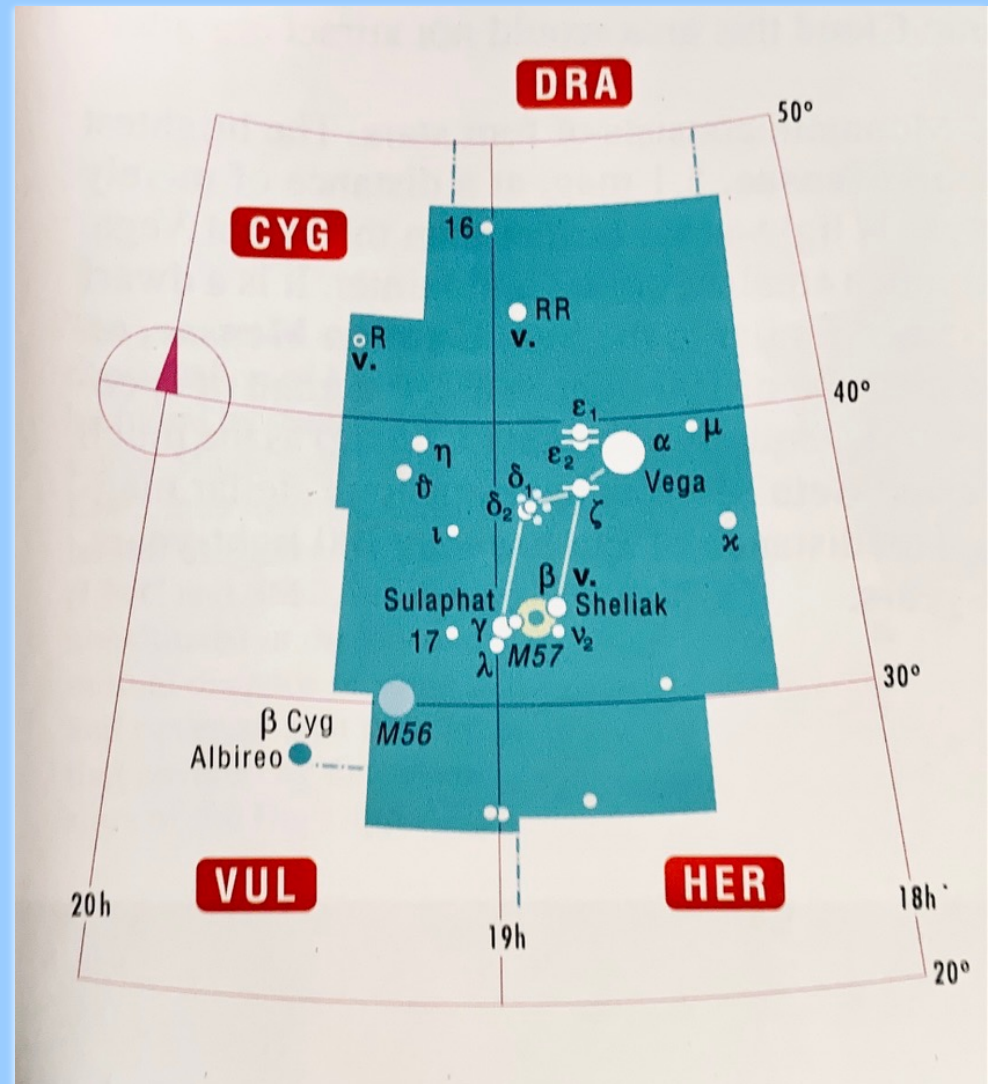
Aquila (The Eagle)

- servant to the Gods
 - abduction of Ganymede
- Altair (alpha Aqu, ETU)
- Barnard's E
 - Barnard 142/3
 - Dark Nebulae (RASC OH)



Lyra (The Harp)

- Harp created by Hermes
 - gifted to Orpheus
 - courier was vulture
- Vega (alpha Lyr, ETU)
 - “swooping vulture”
 - old definition of magnitude 0.0
- Sheliak (beta Lyr)
- many double stars (ETU)
 - epsilon Lyr—Double Double
 - zeta Lyr
 - delta Lyr
- Messier Objects
 - M57—Ring Nebula (planetary)
 - M56—globular cluster



Vulture & Harp

Eastern origin?

1540 Apianus

1590 Hood

1603 Bayer

1648 Blaeu

1661 Cellarius

1700 Allard

1709 van Keulen

1729 Reiner Otten →

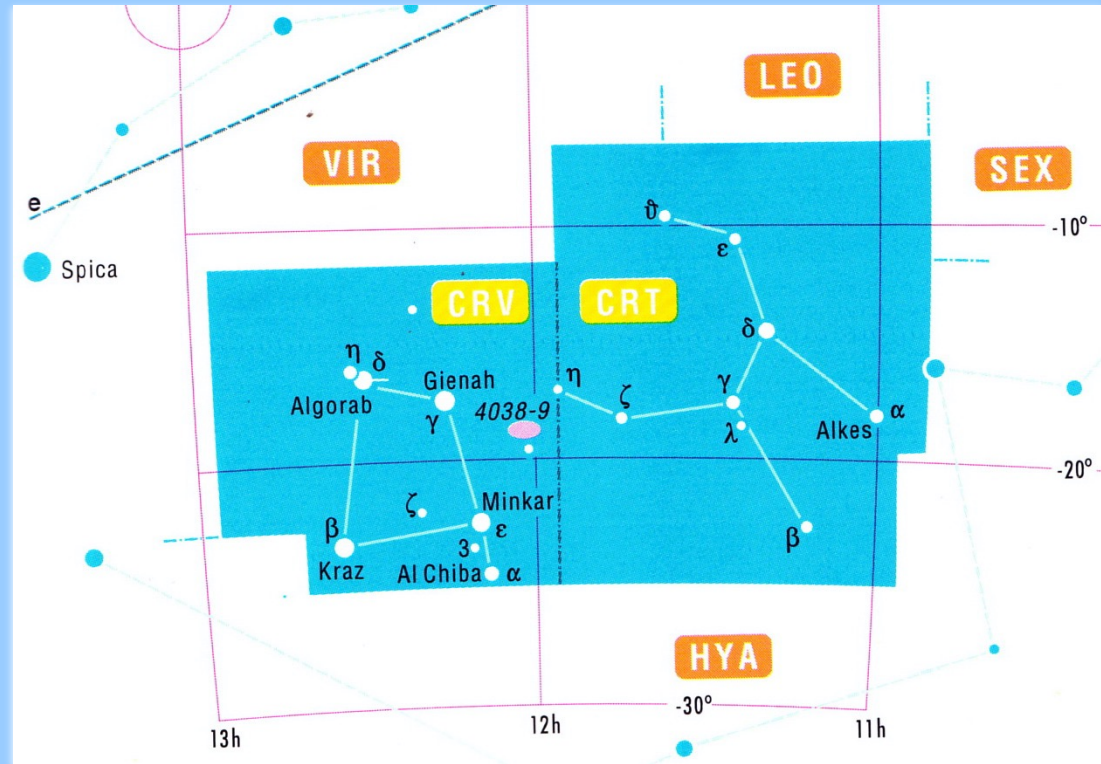
1790 Barlow

1801 Bode



Corvus (The Crow)

- unfaithful servant of Zeus
 - colour: white to black
 - song: taken away
- Antennae Galaxies
 - Finest NGC 4038/9
- Algorab (delta Crv)
 - Double Stars (RASC)

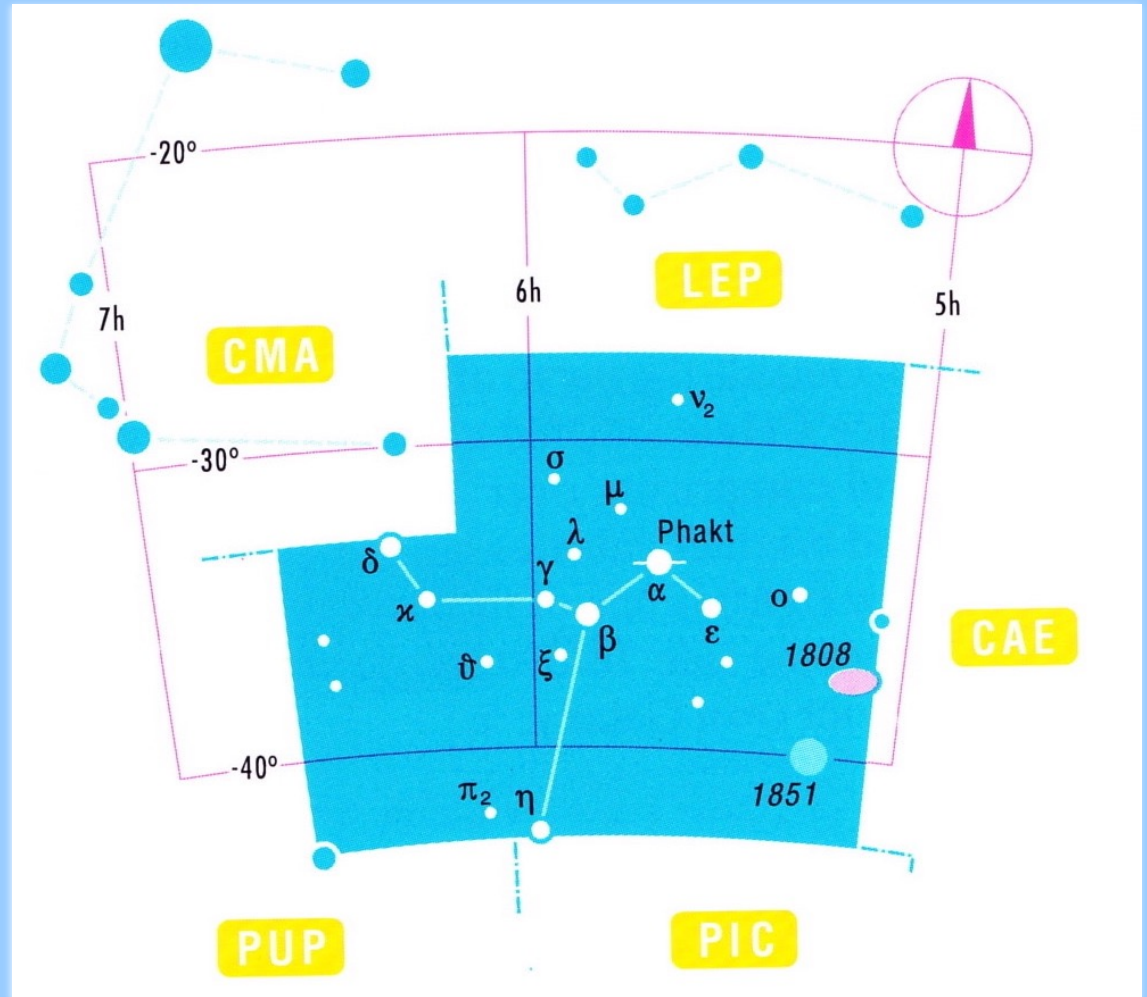


Pop culture: red dwarf star LHS 2520 (near Gienah)
has planet Krypton, home to Superman

Columba (The Dove)

Johann Bode
Uranometria
(1801)

- RASC Obs. Targets
 - none!
- black hole
 - MAXI J0637-043
- exoplanet
 - NGTS-1b



Southern Birds

- Apus (Bird of Paradise)
- Pavo (Peacock)
- Tucana (Toucan)
- Grus (Crane)
- Phoenix (Phoenix)



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Part 2: Indigenous Constellations

Name	Bird
Muin sky story (Mi'kmaq)	7 birds
Niska (Ininu—Cree)*	Goose = Cygnus
Niipin Pinisiw (Ininu)	Summer Thunderbird
Pipoon Pinisiw (Ininu)	Winter Thunderbird
Kereru (Maori)	Wood Pigeon

* See the works of Wilfred Buck, Qilak Award recipient (2023)

<https://www.rasc.ca/world-asterism-project>

Muin (She-Bear) and the Seven Bird Hunters



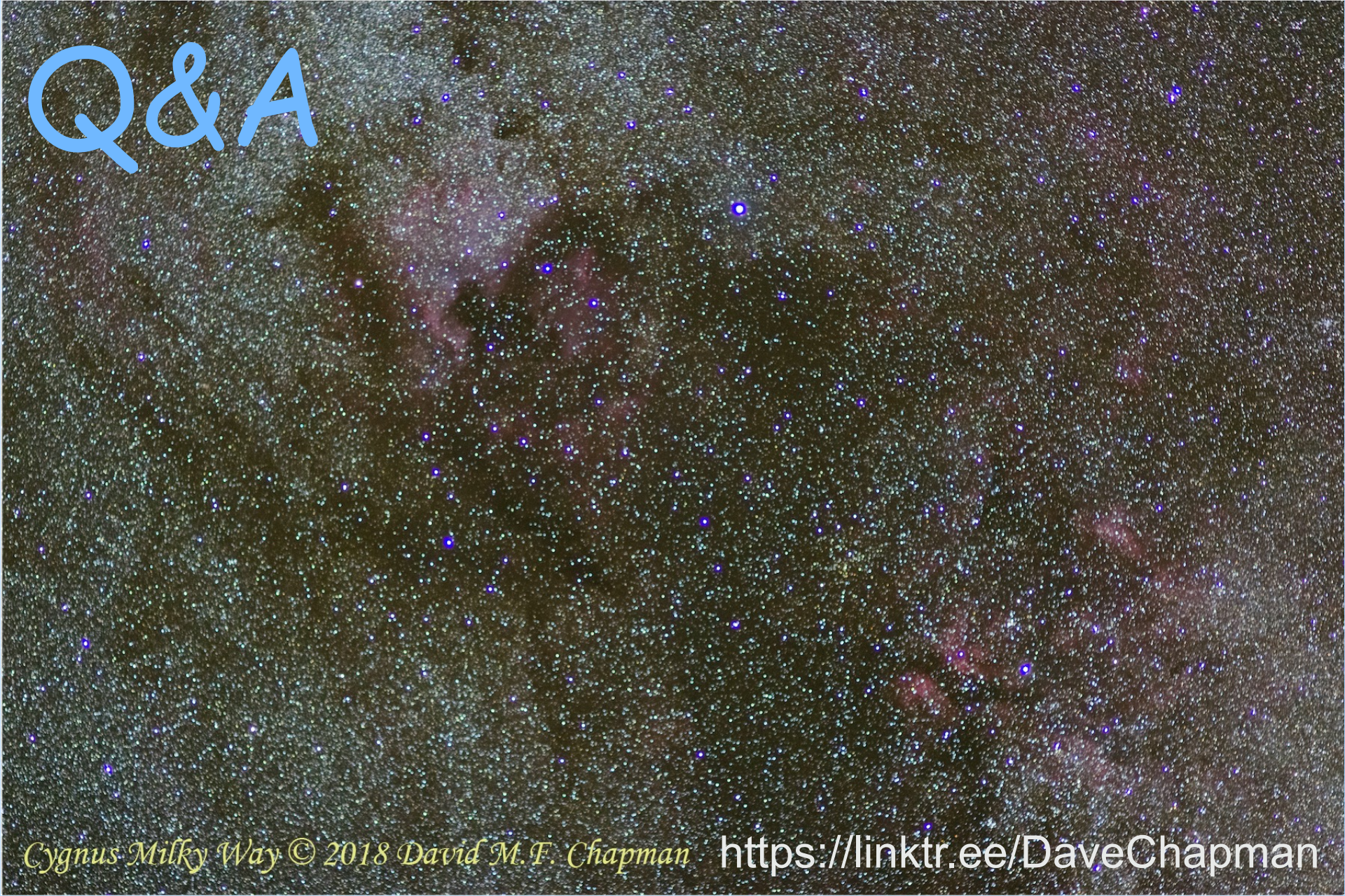
<https://linktr.ee/MikmawMoons>

Kereru (Wood Pigeon) —Maori

- Kereru—NZ Wood Pigeon
 - uses southern stars of Orion
 - South up!
- Belt of Orion—perch
- Orion's Sword—snare
- Rigel—berry (bait)
 - Puanga in Maori
 - rising of Rigel = Maori New Year



Q&A



Cygnus Milky Way © 2018 David M.F. Chapman <https://linktr.ee/DaveChapman>

Kejimikujik Dark Sky Preserve

ISO 1600 Canon 85mm f/1.8 30sx10 18°