



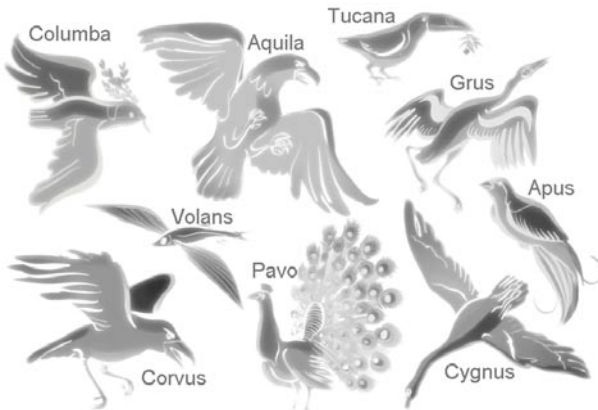
Star Birds of Paradise

by Magda Streicher
[magda@pixie.co.za]

Our forefathers, the seafarers and hunters of ancient times most probably developed names for the patterns and shapes outlined by the stars of the night sky. Most of them are associated with the legends of their cultures and ways of life. Most of the constellation names have Greek and Latin roots and some are very original. The Greek language refers to constellations as “signs”, while Hipparchos, Ptolemy and the Arabians referred to them as “figures”. It is generally accepted that various animals and birds played prominent roles in peoples’ minds in ancient times as can be seen from images they have left us on wood and rocks.

Apus the Bird of Paradise says it all and was without doubt the most appreciated feathered bird. Apus the constellation is located just off the constellation Southern Triangle approximately 13 degrees from the South Pole. The ancient Greeks saw the constellations Apus as the swallow without legs, but it was documented as the bird of paradise. The German edition of Bayer’s work, issued in 1720, called it the “Indianischer Vogel” thus it is still sometimes called the “Indian Bird”. In China it is called the Curious Sparrow, or Little Wonder Bird.

The best-known star-bird constellation shape projected against the night sky is probably **Aquila the Eagle**. Situated west of the constellation Delphinus, this eagle spreads its wings and flies eastward over the Milky Way. Already in 1200 B.C. this bird figure was represented on a Euphratean stone known as The Eagle, the Living Eye or the Bird of Zeus. To the Arabians it became their Black Eagle and the Hebrews knew it as the Falcon or Vulture.



Do you think it might be our ordinary turtle-dove that received the honorary place in the star formation of the constellation **Columba the Dove** situated just south of the constellation Lupus the Hare? Petrus Plancius originated the constellation Columba in 1592 from outliers of the constellation Canis Major.

Corvus the Crow approximately 2000 years ago literally lay equally astride the celestial equator, resting on Hydra's body. The constellation Corvus was also known as the Fig Bird. There is a belief in early folklore, that this bird alone does not carry water to its young.

Flying to the northern hemisphere we acquaint ourselves with the gracious constellation **Cygnus the Swan** hanging at the northern end of the Milky Way. The flying Swan was also known as the owl, the Ibis or the Hen-bird of Venus.

Grus the Crane to me is surely one of the prettiest star constellations of the southern night sky. The bright stars exhibit an unmistakably elegant bird neck shape to the east and form one of the so-called Bayer groups. Keyser imagined it as a Stork in Heaven, from a biblical symbol.

Another of Bayer's twelve southern constellations is the constellation **Pavo the Peacock**, flying south of Sagittarius and the Southern Crown. Pavo may well take pride in its magnificently coloured feathers and starry tail.

Another starry bird to take its place against the night sky is the constellation **Tucana the Toucan**, also known as the beak bird. As late as 1872 Stieler's planisphere called it the "American Goose". Tucana also houses the pretty deep-sky object – globular cluster NGC 104, that can be seen with the naked eye. It is situat-

ed just south of the constellation Phoenix and is privileged to share its home with the Small Magellanic Cloud.

The constellation Volans is known the **Flying Fish** – you would not believe it, but in the Rudolphine Tables it is referred to as "Passer the Sparrow".

Phoenix the Fire Bird is my constellation of sheer delight for this month. This winged bird was shown on Egyptian coins as an emblem of immortality. Others changed the figure to a Griffin but in China it was known as the Fire Bird. The Arabian people knew it as a primitive boat and Al Sufi called it "The Young Ostriches". The constellation Phoenix is situated between Eridanus (close to bright Achernar), Tucana and Grus, just south of Fornax and Sculptor (see skymap).

Theta Phoenicis is situated in the westernmost position of the constellation. This double-star is

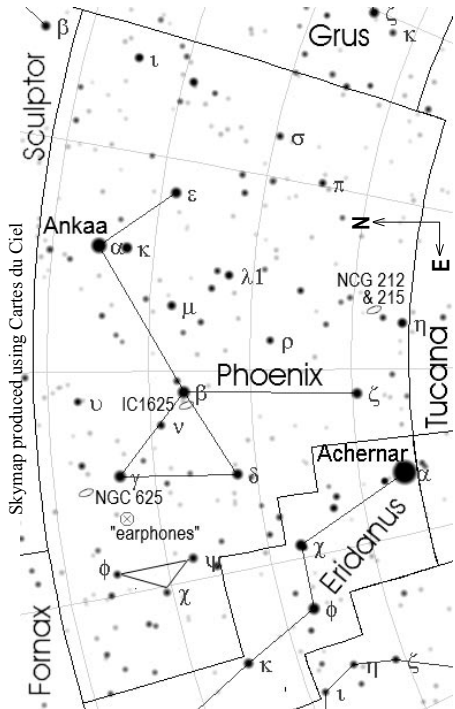


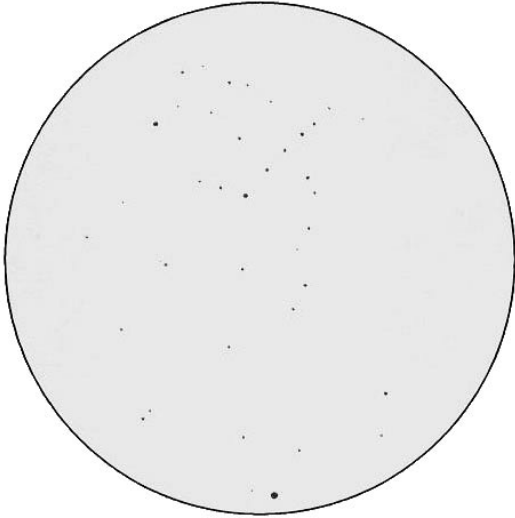
comprised of two white components 6.6 & 7.2 magnitudes, with 4" separation and 275° in PA. It was first documented by John Herschel in 1835. Further to the east and comfortably situated in the centre of the constellation is **Beta Phoenicis**. This beautiful, bright yellow double-star is only 1.4" in separation, with a PA of 346°. The galaxy group Abel 2870 is on a radius of 55' to the east of Beta. The brightest galaxy in this group is 12th magnitude IC 1625, situated only 20' south east of this double star.

The north-eastern corner-star of the constellation is illuminated by Gamma Phoenicis, showing the way to the first deep-sky object. Approximately 2.2 degrees north-east of yellow Gamma is the galaxy **NGC 625**. The galaxy displays a soft elongated E-W haze, which appears more like an extended oval than a spindle. Although generally of high surface brightness, a subtle brightening is evident towards the middle (16-inch – 290x). With even higher power it seems to me that the western end of the galaxy is slightly thicker and blunt with a thinner, sharper and hazier eastern part (16-inch – 462x). A quite prominent string of stars swings away in a southern direction from the galaxy. In the extreme south of the constellation is **xi Phoenicis** (also known as h3387) which is a double star with

a 5.8 magnitude white primary and a 10.2 magnitude yellow companion, with a separation of 13.2" and a PA of 253°. If you are brave enough, search for two more galaxies here. Just 20' NW of xi Phoenicis are NGC 215 and NGC 212, only 5' apart.

I am always on the lookout for asterisms amongst the stars and gladly share this one in Phoenix with you. Approximately 3.7 degrees SE of NGC 625 we find phi Phoenicis and a further 40' SE is an interesting asterism or grouping. I named this one Walkman "**earphones**". It has seven relatively faint stars, close together,





Open cluster ESO 245-SC09 sketched by Magda using her 12-inch telescope at 218 power. The cluster is 12 arcminutes in size. North is up and east to the left.

yet standing out in the field of view. The brightest of the stars, HD 12003, a 7.8 magnitude white star, is situated south of the grouping which is more or less 13' in diameter (16-inch – 290x). Even though it is rather faint I enjoyed this one.

To find the only numbered open cluster in the Phoenix constellation, you have to identify the long triangle that is formed by phi, chi and psi Phoenicis towards the eastern part of the constellation (see skymap). **ESO 245-SC09** enriches its direct surroundings at low power and is about 10' north of psi Phoenicis. This grouping, although faint, stands out nicely against the background (16-inch – 95x). Unique to this cluster is the long faint string, approximately 10' in length N-S completing its western end. Fainter members fan out to the northeast.

To me this cluster resembles a secretary bird with its long legs and outspread wings in flight to the east. Fly with me and discover countless bird shapes in the star cluster groupings that the starry night sky has to offer! ☆

Object	Type	RA (J2000.0)	Dec	Mag	Size
Xi Phe	double star	00 ^h 41.8 ^m	-56°30'	5.8-10.2	sep 13.2"
Beta Phe	double star	01 06.1	-46 43	4.0-4.2	sep 1.0"
NGC 625	galaxy	01 35.1	-41 26	11.0	6.5x2.1'
ESO 245-SC09	open cluster	01 53.7	-45 57		12'
“earphones”	asterism	01 56.0	-43 06	11.0	13'
Theta Phe	double star	23 39.5	-46 38	6.6-7.2	sep 4.0"