Biology of Equus Sapiens

The remarkable Equus Sapiens - more commonly known as the 'Equestrian Pony' - with its four distinct subspecies is the dominant sapient species among the citizenship of the nation of Equestria. The Equestrian Pony displays a number of remarkable physiological and behavioural idiosyncrasies, varied further among the subspecies.

The enormous cranial capacity of the E. Sapiens accommodates the very large brain to body mass ratio which allows them sapient intelligence and the region known as the Corpus Magus – present in all pony subspecies, contrary to conventional wisdom – which combines with certain extra-cranial structures to allow manipulation of the energy known as 'magic'- in certain ways depending upon the subspecies and the individual.

The Corpus Magus and 'magic nerves' are composed of a special kind of neuron cell that carries magical energy rather than electrical energy through its synaptic pathways. As a result of the high energy and sensitivity of this tissue, injury to a structure containing magic nerves - IE: wings or horn - is well known to be painful far beyond an otherwise comparable injury, with a medically induced coma often being the only effective palliative option for particularly severe horn injuries.

Unusually for a herbivorous species, E. Sapiens' eyes are located at the fore of the cranium rather than to the sides. It is believed that the eyes migrated to the fore at around the same time as ponies developed greater manual dexterity and a sapient mind (also the same time as the beginnings of the magic faculties detailed below) to allow them to focus on delicate tasks. The lost peripheral vision was partially compensated by an increase in cervical vertebra flexibility and partially by the enlargement of the eyes and ears to their current proportions.

The E. Sapiens is divided into four easily differentiated subspecies: the Earth Pony (E.S. Terra), Pegasus (E.S. Aves), Unicorn (E.S. Magus) and the exceptionally rare Alicorn (E.S. Deus). All subspecies share the developmental curiosity commonly called a 'Cutie Mark'. Acquired during early adolescence, the symbol appears on either flank when an individual determines the direction of their life. Cutie Marks are connected to the Corpus Magus but so lightly as to be unclear what the link does. Earth ponies possess no extra-cranial magic organs and the Corpus Magus is normally effectively dead tissue. Some Earth Ponies have an active Corpus Magus, manifesting as any of a range of unusual behaviours and often linking to evident mental illness - such as severe hyperactivity or a compulsion to speak in verse.

Debate rages as to whether Zebras and Crystal Ponies are 'breeds' of E.S. Terra or their own subspecies.

A representative Earth pony is noticeably stronger and hardier than a representative Pegasus or unicorn.

Unicorns possess an enamel horn protruding from the crown of the skull, allowing direct and deliberate control of magic, though limited to certain applications that vary by the individual in a manner that has yet to receive an accepted scientific explanation. Theories considered credible are mostly psychological; concerning what the individual has the will and knowledge to do. All unicorns can magically generate light and use a form of telekinesis, regardless of their individual magical talents.

The horn of the Unicorn is unusual for two reasons, first and most obvious being the magical ability rather than as a physical attack and second that it is present at birth, unlike all other horned animals.

This likely has an evolutionary link to the Unicorn horn being quite short and very blunt, so as not to harm the mother during pregnancy, birth and nursing.

A representative Unicorn is more intelligent than a Pegasus or Earth Pony.

Pegasi channel magic subconsciously through their wings to create aerodynamic and gravitational effects allowing them to fly with a body which could never do so mechanically.

While primarily magical, Pegasi do possess some traits for mechanical flight beyond their wings; including bird-like hollow bones and substantially increased shoulder and chest musculature.

Lung capacity and coat insulation value are significantly increased to handle the cold, thin air encountered when flying at high altitude and the eyes have a hard, clear membrane layered over the eyeball and beneath the eyelid to protect from wind shear when flying at any speed.

A representative Pegasus is faster and lighter than an earth pony or unicorn though shorter lived, due to rapid wear on lightened physiology.

One notable behavioural trait of the Pegasus is the reflex of raising wings when significantly excited, be it in fear, anger, anticipation, bravado or – frequently mistaken by other subspecies to be the main or sole cause – sexual arousal. This is believed to have evolved as a part of the pegasus' fight-or-flight response, as raised wings would make the pony appear dramatically larger in the face of a threat and greatly shorten the response time should they choose to flee.

Alicorns (portmanteau from Romane: alae meaning wing and cornu meaning horn) are poorly understood, as the few known specimens are not available for study and what is known is shrouded in legend and what some dub 'reverent ignorance'. They possess both fully functional wings and horns and are believed to be immortal. It is known for certain that the best known specimen – Princess Celestia – is well in excess of a millennium of age yet shows no signs of severe aging. The youngest specimen (Princess Twilight) would be considered young for a mortal, being only in her early twenties. No analysis has offered any explanation of the one-hundred per cent incidence of females among known Alicorn specimens and theories range widely in credibility from conflicting genes on the Y chromosome to an anti-male sexist higher power. The means by which these lifeforms come into being is equally mysterious, with Princess Twilight known to have been a mortal – though certainly remarkable - Unicorn until very shortly before her recent coronation.

The world wherein exists the nation of Equestrian has no shortage of remarkable creatures, not least among them the eponymous Pony, whether they can cast spells, take to the sky, both or neither.

They share their world with dragons, griffins, other equines – donkeys, Arabians – and countless other beasts and beings, magical and mundane, civil and savage.

My Little Pony: Friendship is Magic created by Lauren Faust et al for Hasbro Content of this essay overanalysed by the utterly execrable Agent Tasmania Version 1.3 penned 27th September 2013