

## Schedule : Bayside Astronomy Program - Summer - 2014

<b><u>Week 1 :</u></b>	Lion's Head POD	- Friday, Saturday,	<b>June 27th - June 28th</b>
	Miller Family Camp	- Monday,	<b>June 30th</b>
	Summerhouse Park	- Wednesday,	<b>July 2nd</b>
	B P National Park	- Thursday	<b>July 3rd</b>

### **Welcome : "Preservation of Dark Night Skies"**

The Mystery and Wonder of a Dark Night Sky

The Northern Bruce Peninsula is a "Dark Sky Community"

**Featured Constellations : "The Circumpolar Constellations"**

### **Naked Eye Astronomy :**

a) **Moon Phase** : New Moon June 27<sup>th</sup> ;

b) How Many Stars Can You See ?; c) Distinguishing Stars from Planets;

d) Stars Together - The Constellations vs their Asterisms

**Star Talk : "Beauty and Mystery of Saturn's Rings and Martian Deserts"**

### **Telescopic Sky Show**

Famous Circumpolar Stars, The Deserts of Mars, Saturn's Rings and Moons, Jupiter Low in West

<b><u>Week 2 :</u></b>	Lion's Head POD	- Friday, Saturday,	<b>July 4th - July 5th</b>
	Miller Family Camp	- Monday,	<b>July 7th</b>
	Summerhouse Park	- Wednesday,	<b>July 9th</b>
	B P National Park	- Thursday	<b>July 10th</b>

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**Featured Constellations : "Hercules – the Son of Zeus, Bootes- the Herdsman"**

### **Naked Eye Astronomy :**

a) **Moon Phase** : First Quarter July 4th ;

b) "Fascinating Lunar Topography", Man in the Moon, Maria, Highlands, Terminator

**Star Talk : "The Moon – the Oldest Surface the Eye Can See"**

### **Telescopic Sky Show**

Selected Moon Craters, Lunar Mountain Ranges, Apollo 11 Landing Site, Saturn's Rings, Deserts of Mars,

<b><u>Week 3 :</u></b>	Lion's Head POD	- Friday, Saturday,	<b>July 11th - July 12th</b>
	Miller Family Camp	- Monday,	<b>July 14th</b>
	Summerhouse Park	- Wednesday,	<b>July 16th</b>
	B P National Park	- Thursday	<b>July 17th</b>

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**Featured Constellations** : “*The Ecliptic Constellations*”

**Naked Eye Astronomy** :

- a) ***Moon Phase*** : Full Moon, July 12th;
- b) Lunar Maria, Highlands, and Rayed Craters

**Star Talk** : “The Origin of the Moon : Legacy of the Apollo Space Program”

**Telescopic Sky Show**

Saturn’s Rings, Martian Deserts, Lunar Maria, Lunar Highlands, Selected Rayed Craters

<b><u>Week 4</u></b> :	Lion’s Head POD	- Friday, Saturday,	July 18th - July 19th
	Miller Family Camp	- Monday,	July 21st
	Summerhouse Park	- Wednesday,	July 23rd
	B P National Park	- Thursday	July 24th

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**Featured Constellations** : “ Patterns in the Plane of the Milky Way”  
*Cygnus- the Swan, Lyra – the Harp, Aquila – the Eagle, Scorpius – the Scorpion, Scorpius - the Scorpion, and Sagittarius – the Archer”*

**Naked Eye Astronomy** :

- a) ***Moon Phase*** : Last Quarter, July 19<sup>th</sup>;
- b) “The Milky Way – Touring our Home Galaxy”, “ - Star Clusters of the Milky Way, Ursa Major Moving Cluster, Great Cygnus Star Cloud, Scutum Star Cloud, Sagittarius Star Clouds

**Star Talk** : “The Birth and Death of Stars”

**Telescopic Sky Show**

Saturn’s Rings, Martian Deserts, Open vs Globular Clusters, Galactic Center, Dust Lanes and Spiral Arms ( ie ET Cluster, Open Clusters ie M11, Globular Clusters ie M13,

<b><u>Week 5</u></b> :	Lion’s Head POD	- Friday, Saturday,	<b>July 25th – July 26th</b>
	Miller Family Camp	- Monday,	<b>July 28th</b>
	Summerhouse Park	- Wednesday,	<b>July 30th</b>
	B P National Park	- Thursday	<b>July 31st</b>

**Preservation of Dark Night Skies**

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**Featured Constellations :** “The Delicate Constellations – Lyra \_ the Harp, Vulpecula – the Fox, Sagitta – the Arrow, Delphinus – the Dolphin, and Scutum, the Shield”

**Naked Eye Astronomy :**

a) ***Moon Phase*** : New Moon, July 26<sup>th</sup>;

b) “The Colours of the Stars”

**Star Talk :** “The Birth, Life, and Death of Stars”

**Telescopic Sky Show**

Stellar Nurseries, Young Stars ( Deneb, Vega ), Old Stars (Antares, Mu Cephei ), Planetary Nebula, White Dwarfs and Black Holes, Saturn’s Rings, Martian Deserts

**Week 6 :** **Civic Holiday Weekend**

Lion’s Head POD	- Friday, Saturday,	Aug 1st - Aug 2nd
Miller Family Camp	- Monday,	Aug 4th
Summerhouse Park	- Wednesday,	Aug 6th
B P National Park	- Thursday	Aug 7th

**Preservation of Dark Night Skies**

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**Featured Constellations :** “Cassiopeia - the Queen; and Perseus - the Hero Warrior”

**Naked Eye Astronomy :**

a) ***Moon Phase*** : First Quarter Moon, August 4th;

**Star Talk :** Legacy of Apollo, “*Origin of the Moon*”

**Telescopic Sky Show**

Apollo 11 Landing Site, Select Lunar Craters, Lunar Maria, Lunar Highlands, Saturn’s Rings and Moons, Martian Deserts

**Week 7 :**

Lion’s Head POD	- Friday, Saturday,	Aug 8th - Aug 9th
Miller Family Camp	- Monday,	Aug 11th
Summerhouse Park	- Wednesday,	Aug 13th
B P National Park	- Thursday	Aug 14th

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**Featured Constellations :** “*Perseus- the Hero Warrior, Cepheus- the King, and Cassiopeia- the vain Queen*”

**Naked Eye Astronomy :**

a) ***Moon Phase*** : Full Moon, August 10<sup>th</sup>;

b) “The **Perseid Meteor Shower** (which Peaks on the morning of August 13th)”

**Star Talk : "Shooting Stars and Meteor Showers"**

**Telescopic Sky Show**

Saturn's Rings and Moons, Martian Deserts, Select Lunar Maria, Highlands, and Rayed Craters,

<b>Week 8 :</b>	Lion's Head POD	- Friday, Saturday,	Aug 15th - Aug 16th
	Miller Family Camp	- Monday,	Aug 18th
	Summerhouse Park	- Wednesday,	Aug 20th
	B P National Park	- Thursday	Aug 21st

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**Featured Constellation :** " Andromeda - the Chained Princess"

**Naked Eye Astronomy :**

a) **Moon Phase :** Last Quarter, August 17th

b) The Andromeda Galaxy

**Star Talk :** " A Dark Night Sky" – this profound observation suggests our Universe is Finite in Time

**Telescopic Sky Show**

Our Galactic Neighborhood ... the Milky Way's Nearest Neighbors " The Local Group" , M31, M32, M81, M82, M33, M51

<b>Week 9 :</b>	Lion's Head POD	- Friday, Saturday,	Aug 22nd - Aug 23rd
	Miller Family Camp	- Monday,	Aug 25th
	Summerhouse Park	- Wednesday,	Aug 27th
	B P National Park	- Thursday	Aug 28th

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**Featured Constellations :** "Pegasus – the Flying Horse and Andromeda – the Chained Princess",

**Naked Eye Astronomy :**

a) **Moon Phase :** New Moon, August 25<sup>th</sup>:

b) Kepler Search Area – Lyra-Cygnus region. c) Famous Double Stars .

**Star Talk :** " The Kepler Mission ... the Search for Extra-Solar Planets"

**Telescopic Sky Show**

First Extra Solar Planet Discovered around 51 Pegasi, Featured Double Stars of the Milky Way – Mizar, Albireo, Gamma Delphini, Cor Caroli, Epsilon Lyra

Saturn's Rings and Moons , Martian Deserts,

<b><u>Week 10</u></b> :	Lion's Head POD	- Friday, Saturday,	Aug 30th - Aug 31st
	Miller Family Camp	- Monday,	Sept 1st
	Summerhouse Park	- Wednesday,	Sept 3rd
	B P National Park	- Thursday	Sept 4th

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**Featured Constellation** : "Cepheus"

**Naked Eye Astronomy** : a) *Moon Phase* First Quarter, September 2nd, The Challenge of Astronomical Distances, the 61st Star of the Swan, Delta Cephei, Standard Candles and Interstellar Communication

**Star Talk** : "The SETI Project - Search for ET --- Are We Alone in the Milky Way ?"

**Telescopic Sky Show**

Famous Stars - Delta Cephei, and 61 Cygni, Selected Lunar Craters, Martian Deserts, Saturn's Rings,